

*Modern Perspectives and Strategies
in
Teaching Learning and Evaluation*



Proceedings of NAAC Sponsored National Conference



Organized by
INTERNAL QUALITY ASSURANCE CELL
THE MADURAI DIRAVIYAM THAYUMANAVAR HINDU COLLEGE
Tirunelveli – 627 010, Tamilnadu.



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FOREWORD



**M. Chelliah M.A.,
Secretary, College Committee**

The process of teaching and learning is as important as the content. It is timely, therefore to consider how teachers are engaging with the variety of methodologies and approaches to teaching advocated in the curriculum. Teaching, learning and evaluation are integral components of higher education and the outcomes are pivotal. With advancement in Science & Technology, mode of teaching is also facing new dimensions and the teaching community has to adopt and adapt the new methodologies provided by novel technologies. At this juncture it is needless to say that these novelties will definitely impart on the delivery of information and knowledge in a more effective manner.

The Management and IQAC of our Institution is much delighted to publish more than 100 research papers received from various Institutions highlighted by presentations from eminent personalities in Higher Education in the proceedings of the National Conference on MODERN PERSPECTIVES AND STRATEGIES IN TEACHING, LEARNING AND EVALUATION organized on 30th September and 1st October 2016. I definitely believe this Proceeding will create a knowledge platform for the learners as well as teachers in the arena of Higher Education.

In my capacity as the Secretary of the college, I would like to place on record my appreciation for the Principal, Organizing Secretary and members of the Organizing Committee.

A handwritten signature in black ink, appearing to read 'M. Chelliah', with a long horizontal flourish extending to the right.

M.Chelliah

FOREWORD



Dr. S. Subramanian
Principal

Teaching and learning strategies are complex processes that interact with one another, suggesting that in-depth, context-specific analyses are necessary to fully understand each strategy's role in enhancing student performance. Teaching and learning strategies are an important area of educational policy and practice. An international perspective on these issues informs students, parents, teachers, policy makers and other stakeholders about the most common patterns in their system, how these compared to other countries, and how these practices vary across schools within these systems. When examining these issues, it is important to inform students, parents, teachers, policy makers and other stakeholders about the most common patterns in their systems and how teaching and learning practices vary from school to school within these systems. An international perspective can also add important insight on education systems.

This national conference on MODERN PERSPECTIVES AND STRATEGIES IN TEACHING, LEARNING AND EVALUATION organized on 30th September and 1st October will provide a common platform to the teaching and learning community in the aspect of Teaching strategies range from the ways in which classrooms and resources are organized and used to the ways in which teachers and students engage in day-to-day activities in order to facilitate learning.

I would like to thank the Management and IQAC of our institution, Faculty members, Students and Research scholars who played an active role in making this conference a successful one.

A handwritten signature in black ink, appearing to read 'S. Subramanian', with a stylized flourish at the end.

Dr. S. Subramanian

PREFACE

Teaching Learning and Evaluation are embedded together as the root of any academic performance. Each aspect is so significant individually and a great academic segment. Evolution is quite natural in any process. Teaching, learning and evaluation too got tremendous changes during every era. After the recent advancements in science and technology there was a vast level of transition in the above said process. Many novel concepts were identified, new strategies and tools were designed and innovative practices were tested to improve the understanding of the learners, to make teaching more effective and to create accurate assessment methodologies.

Witnessing all the above said rapid changes in the process of teaching, learning and evaluation it has become so essential to make this transition into discussion and positive debate by the interested stake holders. Conferences, Seminars and Workshops are encouraged to share the innovative and modern methods in enhancing academic excellence. The NAAC sponsored National Conference on MODERN PERSPECTIVES AND STRATEGIES IN TEACHING LEARNING AND EVALUATION organized by the Internal Quality Assurance Cell of The M.D.T Hindu College too has the same idea of discussing and sharing new ideas and practices in the above said three vital parts of academic performance in the presence of reputed Educationists. The highly informative and thought provoking special addresses delivered by the resource persons from various stated paved a way for better understanding in methodological, technological and psychological variations in teaching, learning and evaluation. The collection of research papers compiled in this volume brings out the positive discussions over various new strategies in the three academic areas. There is no doubt in mentioning that this volume will be a great feeding ground to any individual teacher as well as any educational institution who are seeking for innovative and fruitful methods in teaching learning and evaluation.

In this moment I express my gratitude to the Management, Principal and faculty members for their matchless support in bringing out this volume successfully. I am grateful to NAAC for the financial assistance. My hat is off to the HINDCO Publication for publishing this volume so elegantly at proper time. Finally I record my deepest thanks to the team of my colleagues who strained more Really more than what I did, for bringing out perfection in this volume of research papers.



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21st Century Skills for Students and Teachers

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Introduction

There has been a significance to emphasize information and knowledge services. Knowledge itself is growing ever more specialized and expanding exponentially. Information and communication technology is transforming how we learn and the nature of how work is conducted and the meaning of social relationships. Shared decision-making, information sharing, collaboration, innovation, and speed are essential in today's teaching and learning. Today, much success to able to communicate, share, and use information to solve complex problems, and to adapt and innovate in response to new demands in relation to changing circumstances, which ultimately leads to expand the power of technology to create new knowledge. Hence, new standards for what students should be able to do are replacing the basic skill competencies and knowledge expectations of the past. To meet this challenge, to acquire the creative thinking, flexible & colleagues problem solving, collaboration and innovative skills are very much necessary.

Learning Skills - Definition

Learning through digital age literacy, inventive thinking, effective communication and high productivity. The learning skills has six key elements for fostering 1) emphasize core subjects, 2) emphasize learning skills, 3) use innovative tools to develop learning skills, 4) innovation in teaching and learning 5) the content of teaching and learning and 6) assessment measures.

What are Learning Skills?

Core Subjects and Themes

Traditional education models have often focussed on learning identified content for subject areas (i.e. maths, science, language arts, and social studies), and then assessing this content knowledge with quizzes, and tests at the end of a chapter or learning module. Desired outcomes within frameworks include learning traditional subject and contemporary content themes in combination with the interdisciplinary themes. The core subjects and themes that frame learning include traditional core subjects while emphasizing public awareness, global awareness, financial awareness, health awareness and environmental awareness.

Public awareness

Public literacy speaks to the need for students to be able to understand and influence people decision-making. This theme focusses on the importance of staying informed and understanding governmental processes, being able to participate in public life, and recognizing the local and global implications of public decisions. There are number of lesson plans and classroom exercises for teachers to help students to understand the ideological positions and the theoretical patterns that underlie opposing viewpoints in current political debates.

Global awareness

The global awareness theme speaks to the need for students to be able to learn from and work collaboratively with individuals from diverse cultures, religions, ideologies, and lifestyles in an environment of openness and mutual respect. This theme also references the ways in which students utilize the modern skills to understand and engage with global issues and diverse learning communities. Students who participated in international collaborative e-learning projects showed heightened motivation in class, improved reading and writing skills, and enhanced engagement. And cross-cultural deliberation through Web technologies helps to break down stereotypical notions regarding cultures other than one's own.

Financial awareness

Financial literacy speaks to the set of skills individuals need to make informed economic decisions. Research indicates that, there is considerable deficiency in financial literacy among students and adults. Financial literacy is a major problem when it comes to making individuals

financial decisions. Other studies find that low-income consumers, those with less education tend to have below-average financial literacy scores.

In recent years, supporters of financial education, defined as knowledge that helps people make sound, informed financial decisions has been reinforced by the findings of studies that show that financial literacy training has had a positive impact on financial knowledge. However, that an increase in financial knowledge does not necessarily translate into improved financial behavior. Instead, they contend that causality may be reversed since people may gain knowledge as they save and accumulate wealth, or there may be a third influence, namely, family experiences and economic socializations, that affects both knowledge and behavior.

Further examination of the relationship between the nature of economic socialization and financial literacy is much needed. An emergent body of research suggests that, poor job attendance and performance may be linked more closely to financial distress than to demographics (e.g., age, gender, and/ or income). Financial education has been shown not only to enhance student's knowledge levels, but also to have a lasting positive impact on their financial behaviours. Graduates to be effective workers, financial competency (i.e., managing money, understanding banking, using credit wisely, understanding taxes and insurance, understanding investing and homeownership, and understanding the implications of consumer fraud and identify theft) is an important curricular objective to consider.

Health awareness

The emphasis on health literacy addresses the need for individuals to be able to access and use high quality information to make health related decisions. This includes a working knowledge of ways to access health information and services and a working knowledge of preventive health measures. Inadequate health literacy can result in "difficulty assessing health care, following instructions from a physician, and taking medication properly. In his context two important questions must be addressed: 1. Are literacy skills related to; (a) Use of health care services? (b) Health outcomes? (c) Costs of health care? (d) Disparities in health outcomes or health care service use according to race, ethnicity, culture or age. 2. For individuals with low literacy skills, what are effective interventions to: (a) Improve use of health care services? (b) Improve health outcomes? (c) Affect the costs of health care? (d) Improve the health outcomes and/or health care service use among different racial, ethnic, cultural, or age groups? Health literacy was reported using four performance levels: Below Basic, Basic, Intermediate, and Proficient. The majority of adults (53 percent) had intermediate health literacy. About 22 percent had basic and 14 percent had below basic health literacy. Relationships between health literacy and background variables (such as educational attainment, age, race/ethnicity, where adults get information about health issue, and health insurance coverage) were also examined and reported.

Environmental awareness

In the coming decades, the public will more frequently be called upon to understand complex environmental issues, assess risk, evaluate proposed environmental plans and understand how individual decisions affect the environment at local and global scales. Environmentally literate individuals at the start of the 21st century will need to be able to understand and discuss both man-made and natural environmental issues and propose or debate alternative solutions to these problems.

David Orr, describes the need for and debate over environmental literacy in his book *Ecological Literacy*.

"The crisis of sustainability and the problems of education are in large measure a crisis of knowledge. But is the problem as is commonly believed, that we do not know enough? Or that we know too much? or that we do not enough about some things and too much about other things? Or is it that our scientific methods are in some ways flawed? Is it that we have forgotten things we need to remember? Or is it that we have forgotten other ways of knowing that lie in the realm of vision, institution revelation, empathy, or even common sense? Such questions are not asked often enough....."

It is clearly proves that, we should not expect students to gain a detailed knowledge about the content of all environmentally relevant disciplines. Instead, students should be taught how to ask three

questions to teachers/ experts that include “what can happen”, “what are the odds,” and “how do you know.” Students do not need to know the technical aspects of opposing views, but they should have the skill to evaluate the credibility of processes and arguments. Environmental literacy as the capability for a contextual and detailed understanding of an environmental problem in order to enable analysis, synthesis, evaluation, and ultimately sound and informed decision-making at a citizens’ level. This means that “environmentally literate” students will have the knowledge, tools, and sensitivity to properly address environmental problems, and to conscientiously include the environment as one of the considerations in their work and daily living.

Environmental literacy provides students with the ability to understand and utilize the language of the environment, and respond to its grammar, literature, and power of speech. It involves understanding the underlying scientific principles, value systems, and the cultural, aesthetic, ethical and emotional responses that the environment invokes.

Visual awareness

The graphic user interface of the internet and the convergence of voice, video, and data into a common digital format have increased the use of visual imagery dramatically. Advances such as smart phones, digital cameras, graphics packages, streaming video, and common imagery standards, allow for the use of visual imagery to communicate ideas. There is conflicting evidence regarding whether younger and non-traditional learners prefer image-based over textual content for learning.

Communication and collaboration

Learning is a fundamentally social activity—whether in classrooms, workplaces, or other environments. The communication and collaboration skills sets refer to the ability of individuals to communicate clearly, using oral, written, and non-verbal languages, and collaborate effectively and responsibly with diverse populations. For example, most of the students purchase bread and are unfamiliar with baking. The world of people adding and mixing measured ingredients to make bread. Although communication and problem-solving skills have always been important that society now demands that everyone to have these skills, not just an educated elite. While education has focussed on the fundamentals of good communication—speech, writing and reading the demands of social relations and global economy call for a much more diverse set of communication and collaboration skills.

Students should be able to articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts. Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions. Use communication for a variety of purposes [e.g., to inform, instruct, motivate and persuade]. Utilize multiple media and technologies, and know how to judge their effectiveness as well as assess their impact. Communicate effectively in diverse environments [including multi-lingual]. Demonstrate the ability to work effectively and respectfully with diverse teams. Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal. Assume shared responsibility for collaborative work, and value individual contributions made by each team member.

These communication and collaboration skills can be learned through a variety of methods (e.g., project-based learning, problem-based learning, and design-based learning). Research on teaching communication and collaboration skills encourages direct and mediated communication, working with others on team projects, and performances-based learning and assessment.

Critical thinking and problem solving

Critical thinking and problem solving skills include the ability of individuals to a) reason effectively, b) ask pointed questions and solve problems, c) analyze and evaluate alternative points of view, and d) reflect critically on decisions and process. Specifically focuses on the ability of learners to: a) reason effectively, b) use systems thinking, c) make judgements and decisions, and solve problems. Critical thinking skills a twist in the 21st century is the availability of advanced technologies for accessing, manipulating, creating, analyzing, managing, storing and communicating information.

Creativity and innovation

Creativity is often described as an essential skill that can and should be fostered. Technology allows individuals to produce high quality work in a range of media that provide opportunities for creativity. Lack of attention to developing creativity and innovation skills is often based on a common misperception that creativity is only for artistic-types and geniuses—that creativity is something one is born with or without. Creativity can be nurtured by teachers and learning environments that encourage

questioning, openness to new ideas, and learning from mistakes and failures. Creativity and innovation skills can be developed, like other skills, with practice and over time. Though it is difficult to assess creativity, there are multiple instruments and assessments that have been designed to measure creativity in specific fields such as problem solving and design.

Life and Career Skills

Life and career skills focus on the ability of individuals to work effectively with diverse teams, be open-minded to varying ideas and values, set and meet goals, manage projects effectively, being accountable for results, demonstrate ethical practices, and be responsible to both one's self and the large community.

Leadership and responsibility

Leadership and responsibility skills include the ability of individuals to work with the interest of the larger community in mind, to inspire others by example, and to capitalize on the strength of others to achieve a common goal.

Productivity and accountability

Skills that fall into the "productivity and accountability" category include: setting and meeting goals, prioritizing needs, managing time, working ethically, and collaborating and cooperating with colleagues and clients. The skills maintain that students should be able to manage projects; set and meet goals; prioritize, plan and manage work; produce results; multitask; work positively and ethically; be accountable for results; and collaborate and cooperate effectively with teams.

Social and cross-cultural skills

Social and cross-cultural skills reference the ability to work well with colleagues, present one professionally, and respect and embrace social and cultural differences. This ability is an essential life skill. Understanding and embracing cultural and social differences and using those differences to develop new ideas and new solutions to problems are increasingly important in social spheres as well as in the workplace. Students should be able to interact effectively with others, conduct themselves in a respectful and professional manner, work effectively in diverse teams, respond open-mindedly to different ideas and values, and be able to work effectively with people from a range of social and cultural backgrounds.

Information, Media and Technology Skills

Media skills

The literature on 21st century media skills argues that, it is essential for individuals to be able to access, understand, and analyze media and media messages. This skills set includes the ability to understand media bias and the ways in which media influences beliefs and behaviors. A media literate individual will be able to understand ethical issues surrounding the production of and use of various media forms and critique the inclusion or exclusion of opinions or factual information in media reports. Media skills also refer to the ability of individuals to effectively create and deliver media products. Learners need skills in critically evaluating and creatively producing representations in a variety of media.

Information skills

Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning. In order to thrive in a digital economy, students will need digital proficiencies. It is important for the educational system to make parallel changes in order to fulfill its mission in society, namely the preparation of students for the world beyond the classroom. Information literacy is "the ability to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." Information literacy skills include: accessing information efficiently, evaluating information critically, and using information accurately and creatively. The literacies form the basis for lifelong learning. They are common to all disciplines and to all learning environments. Information literate individuals are able to determine the extent of information needed. Access the needed information effectively and efficiently. Evaluate information and its source critically. Incorporate selected information into one's knowledge base. Use information effectively to accomplish a specific purpose. Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally.

Due to the increasing volume of information available, teachers, students, and other stakeholders are faced with diverse, abundant information choices. Additionally, evermore so, information comes to individuals in unfiltered formats, raising questions about its authenticity, validity, and reliability. The uncertain quality and expanding quantity of information pose large challenges for the effectual application of relevant information. The mere abundance of information will not in itself create a more informed citizenry without a related set of abilities necessary to use information effectively.

An approach to teaching information and technology skills defines information literacy as the ability to 1) define information problems and identify information needed, 2) understand information seeking strategies, 3) locate sources and find information within sources, 4) Use information, 5) synthesize information, and 6) evaluate or judge information and/or process.

To measure information skills, the reliability and validity of a computer-based test- the information Seeking Skills Test (ISST) to measure students' ability to find and evaluate information. The Educational Testing Service (ETS) has also introduced the ICT Literacy Assessment, designed to measure students' abilities to find, use, manage, evaluate, and convey information efficiently and effectively.

Information literacy goals, standards, and benchmarks throughout the curriculum is the best approach to help students learn how to find, evaluate, make efficient use of, and cite electronic materials responsibly. Libraries with highly trained staff can act as a catalyst for the incorporation of information skill standards and increased student achievement and lifelong learning. Effective librarians, in collaboration with the class room teacher, can positively impact the ability of all students the ability to identify information needs, seek out resources to meet those needs, and then analyze, synthesize, evaluate, and communicate the resulting knowledge.

Technological skills

The use of social media- from blogging to on-line social networking to creation of all kinds of digital material is central to many teenagers' lives. Learning initiatives, informed by emergent research on how people best learn, leverage emerging technologies and embraces the collaborative, participatory learning made possible through Web.

Web technology enables user to produce and share content in new ways and in real-time: user-generated content creation and 'remixing' become creative and engaging practices that challenge the traditional relationships between teachers and students in providing information and content for learning. E-learning is the accessing of information, instruction, and/or interaction through the Internet or Intranet using instructional materials and tools such as web-based resources, e-mail, discussion boards, blogs, chat or video.

Support systems

The vision, mission and values of educational agencies are critical for framing an agenda for learning work. Once these statements or goals have been developed, education leaders can then align them with their strategic plans, strategies, and accountability systems. This section of the review discusses two support systems for learning skills.

Learning Environments

Learning environments are *system of systems* that creates learning practices, human support and physical environments that will support the teaching and learning of skill outcomes. Supports professional learning communities that enable educators to collaborate, share best practices, and integrate skills into classroom practice. Enables students to learn in relevant, real world contexts (e.g., through project based or other applied work). Allows equitable access to quality learning tools, technologies, and resources which provides architectural and interior designs for group, team, and individual learning. Supports expanded community and international involvement in learning, both face-to-face and online.

Best Practices

Emerging research encourages teachers and other educational stakeholders to a) focus on real-world problems and processes, b) support inquiry-based learning experiences, c) provide opportunities for collaborative project approaches to learning, d) and focus on teaching students how to learn (above "what" to learn).

Project-Based Learning

The research on project-based learning has illustrated significant benefits for students who work collaboratively on learning activities in contrast with students who work alone. An additional research finding was that students who have difficulties with traditional classroom/textbook/lecture learning benefit significantly from a project-based learning experience which more closely aligns with their learning style and preference.

Problem-Based Learning

Problem-based learning, a form of project-based learning, allows teachers to develop, and students to focus, on complex, real-world problems using a case study approach. When students work in small groups to research and pose solutions to problems, both a collaborative and multifaceted environment is created. Within this environment, students can explore multiple solutions and best practices for tackling projects. Studies and meta-studies of research that has focusses on problem-based learning have found that for factual learning, problem-based learning has similar impacts to traditional learning methods, but that problem-based learning does exceed traditional learning methods when skills such as critical thinking, communications, collaboration, and applying knowledge to real world situations are measured.

Design- Based Learning

Design based learning has been shown to have the most impact. Popular design-based learning activities include robotics competitions wherein student teams design, build and then pilot their robots in a series of competitive challenges. Research has found that, students who participate in learning by design projects have a more systematic understanding of a system's parts and function that control groups. Obstacle to collaborative and inquiry-based learning include a) the ability of teachers to choose activities and/or topics that benefit from differing viewpoints and lived-experiences of students, b) the need to strategically select students who will work well together and set ground rules so that all students may have the opportunity to participate, and c) encouraging multiple strategies to encourage deeper discussion and better learning for all group/team members.

Assessment

Assessment of student skills and knowledge is essential to guide learning and provide feedback to students, teachers, and parents on how well students are achieving set standards. Assessment systems be based on multiple measures of students' abilities that include 21st century skills. Assessment of 21st century skills should be listed as an integral part of the academic assessment in reading and science. Reporting requirements should be expanded to include information on whether the student is achieving 21st century skills. Funds should be made available for pilot projects that examine the use of assessments that measure 21st century skill competencies. Funds should be allocated for an international benchmarking project that allows students to be compared to their environmental peers in terms of competencies in 21st century skills.

Conclusion

This 21st century skills suggest that educational decision makers need to acknowledge that the academics of yesterday are not sufficient for today. The current state of research on the impact of 21st century skill acquisition of student achievement is steadily expanding, with current research seeking to document the longitudinal effects of the acquisition of 21st century skills on student success and workforce development. It is imperative to better educate the workforce not only in course, but also in 21st century skills. Given the economic and political challenges of our times, students will need plenty of practice developing and fine-tuning their 21st century skills to become better problem solvers and more creative innovators. Current research on 21st century skills and skill acquisition is focussing on social and cross-cultural interaction, developing and piloting programs and curriculum for students to develop leadership and responsibility skills, and the development of a body of research that can support the preliminary research that illustrates the impact of 21st century learning skills on student achievement and workforce development. There is much work to be done to incorporate 21st century learning standards and implement curriculum designed to teach to such standards. To adequately prepare-to become college and work ready-students and teachers must learn and share content within the context of 21st century skills. To do this, they will need the support of education policy makers, business, community and family.

Quality vis-à-vis Quantity in Higher Education: A Perspective

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Education is the most powerful instrument of social transformation and economic progress and the attempt to create a new social order based on freedom, equality and justice can only succeed if the traditional education system was revolutionized both in content and context. (Government of India Resolution, 1964).

As against 2 lakh students in 1950-51, the total enrolment in higher education in 2014-15 was 3.33 crore, comprising 1.79 crore boys and 1.54 crore girls. Similarly at the time of enactment of the UGC Act (1956), there were only 58 Universities. In 2014-15, according to the UGC, there were 711 Universities, of which 46 Central Universities and 128 deemed Universities. Yet the progress of higher education cannot be measured in numbers. The gross enrolment ratio defined as the number of students enrolled as a percentage of the population in the 18-20 age groups is around 15 %. The comparative figure for the most developed countries is over 50 per cent, the world average is over 23 per cent. The draft new education policy of the present government mentions the regional variations in the enrolment. In Chandigarh enrolment is 53 %, while Chhatisgarh has registered a mere 8.3 %. The government seeks to increase the enrolment ratio only by establishing private educational institutions, as the draft report says that government would not open new institutions due to lack of funds. (Already higher education has been massively privatized- 62 % of the total enrolment).

The government claimed that allocation of funds for Education had grown nearly eight times in the past decade from Rs. 11,000 crore in 2004-05 budget to over 82, 400 crore in 2014-15. However this total outlay is only 3 % of the GDP. We are nowhere near 6 % of the GDP, as recommended by Kothari Commission or the 10 % of the national income, as committed by the nationalists at the Karachi Session of the Indian National Congress in 1931. It has to be further remembered that 2/3 of the allocation for the education sector go to school education. Therefore the poor outlay of 3 % of the GDP impinges on higher education, notwithstanding government's 3 Es of Expansion, Excellence and Equity. The Central Advisory Board on Education (CABE) sometime back recommended that the education outlay should be increased to six per cent of the GDP, which should include one per cent for higher education. If the government accepts this, there should be sufficient money available for higher education, including for scientific research.¹

Today, thanks to the initiatives taken by Jawaharlal Nehru, the first Prime Minister of our country, our scientists have made impressive progress, particularly in information technology, space and nuclear sciences. Still compared to some developed countries, India is lagging behind. Our Union government sets apart 10% of the budgeted expenditure for Science and Technology. In comparison, it is pointed out that the US invests 75 times more than India on Science and Technology (spent \$ 3.7 billion during 2003-04). China's investment in Science is four times more than India. China supports innovative research projects in basic technologies, especially in the field of energy, water resources and protection of environment.

Huge funds have gone to applied science in the last twenty years in our country. Big laboratories stacked with instruments have been set up for applied science. In contrast, the development of pure science during this period of time has been neglected. Persons of genius in pure science have been ignored or sidelined. It is high time the scholars of pure science were identified and supported financially to conduct projects independently of any institutional restraints. Besides, what India needs, more than application of science, in this age of globalization, is the development of scientific outlook, which according to Jawaharlal Nehru 'should be a way of life, a process of

¹ Suman Sahai, 'Trojan Horse,' in Ira Pande ed. *Beyond Degrees: Finding Success in Higher Education* (New Delhi: HarperCollins), p. 112.

thinking, a method of acting and associating with our fellow men.’ This we cannot achieve neglecting humanities and social sciences.

In a democracy the universities/ colleges have to satisfy the expectations of its three important components namely the market, civil society, and the state. The market requires trained personnel for the technologically complex economies; the state requires trained elite to run its apparatus and the civil society requires a liberal education to foster and strengthen the values of democracy.² So, higher education cannot be simply reduced to mere economic instrument with its sole focus on equipping students with the practical skills needed by employers. Nor should the purpose of our higher education be simply to produce engineers and scientists able to compete with their counterparts abroad. Reduction of learning to job skills rather than an inquiry into the larger issues of life can be disastrous in the long run. There are instances of even candidates who would otherwise appear to possess adequate skill in computing and communication getting rejected by corporate companies for want of cognitive and analytical skill which is the unhappy outcome of our system of rote-learning.

The main goals of higher education are teaching students to think critically, broaden their intellectual horizons and promote self-awareness. Erich Seligmann Fromm, a German Social Psychologist, hit the nail on the head when he wrote, ‘The main aim of our education seems to be merely acquiring information and as many facts as possible for the purposes of the market. Such type of education does not give much scope for thinking and originality but it only makes the students slaves of information. At the end of such education the students are left with no interest in or respect for thinking which is an instrument of realizing truth. So the emphasis is only on the material benefits that knowledge and information can bring and not on discovering truth and living accordingly so that you can be a better human being.’³

Our principal pillar of higher education is undergraduate college network. Undergraduate education accounts for over 85% enrolled students, studying first degrees in arts, commerce and science. There were 40, 760 colleges, recognized by the UGC in 2014-15. The importance of three years of undergraduate education for a student as well as a society has been stressed by American Philosopher Allan Bloom as ‘civilization’s only chance to get him.’ Colleges are the places where the youth enter an active phase of self development. In this phase they require to be given some freedom and leisure to think fearlessly and to interact with other minds in the college, within a culture of argument and dissent. Neo-liberalism has however altered the focus of syllabi from values of critical thinking to skills such as computing, communication and team working.

At the under-graduate level, students have to do their course in English. In countries in the West, students learn their subjects in colleges in the same language they pursued in school. As a result in India students pass out writing their examinations in their regional language. This creates a divide between students of vernacular learning and English educated. Ten years ago, when I was returning from Taiwan, via Singapore, to Chennai, there were two Chinese girls seated next to me. They were to join an international school in Chennai for their studies in plus two. I picked up conversation with them and they were seemingly at home in English. I asked them what their medium of learning in school was. They said, Chinese. Then I asked how come they speak English without any difficulty, when subjects were taught in Chinese. Their answer was English was also taught. Yes English is taught in China with all seriousness. In India either English should be banished or taught in all earnestness, appointing competent English teachers as in China.

The IITs have succeeded because, as Prof. P.V. Indiresan has stated, ‘they have enjoyed the three basic things: Freedom to choose whom to teach, who will teach and what to teach along with full budgetary support. Besides, according to him, IIT students never ask for holidays, nor complain about tough questions. IIT faculty accept responsibilities with no complaint of workload. That is why

² Harsh V. Pant, “In Defence of Liberal Education”, in Ira Pande ed. *Beyond Degrees: Finding Success in Higher Education*, p. 170.

³ M.S. Kurhade, ‘The Roadless Journey of Universities,’ *University News*, May, 2014.

both IIT teachers and students are accepted as models in academic culture.⁴ Our teachers and students in rural colleges are advised to emulate the examples of their peer groups in IITs. But as Indiresan cautions IITs will remain successful so long as these privileges are allowed to remain. Ignoring this caution, the present government has initiated budget cuts since 2014 for the five new IITs and IIMs from Rs. 500 crore to Rs. 65 crore (67% cut). For existing 16 IITs, the budget has been cut by Rs. 163 crore. Professor Kakodkar headed Eleven Member Committee's recommendation of more autonomy to IITs to 'scale greater heights,' made in 2010 has been thrown to winds. There has been mounting evidence of MHRD Ministry's interference in academic affairs. The University Education Commission headed by Dr. Radhakrishnan had scathingly commented on such a trend as early as 1948. It said, 'Institutions of higher learning controlled and managed by governmental agencies act like mercenaries, promote the political purposes of the state, make them acceptable to an increasing number of their population and supply them with weapons they need. We must resist, in the interests of our own democracy, the trend towards the governmental domination of the educational process.'

Sarvepalli Radhakrishnan declared in 1948 that 'education is a universal right, not a class privilege.' Kothari Commission in 1966 observed that it was the responsibility of educational system to bring different social classes and groups together to promote an egalitarian and integrated society. But the present system of education, instead of doing what the two illustrious Education Commissions had urged, is tending to increase social segregation and to perpetuate and widen class distinction. There is segregation thus in education itself- the minority of private, fee charging better schools meeting the needs of the elite classes and the vast bulk of free, publicly maintained, but poorly run schools and colleges being utilized by the rest.

The reputation of Institutions of higher learning is measured by the extent of research. Research is knowledge and experience of research leads to quality teaching and quality teaching imparted to the young in turn enriches higher learning. Quality of teaching and research will attract students from many parts of the country, making a new environment and base for the development. There are 13 national organizations like ISRO, DRDO, DBT, DST, CSIR, ICAR spending Rs. 500 crores a year in sponsored research. However equal emphasis is not given to research in areas of the arts and literature, humanities, law, economics, commerce and management 'to promote the balanced growth of a society that seeks to preserve its civilizational heritage.'⁵

As for updating of curriculum, less said is better. History, which is my own discipline, has undergone a vast change. So much research has been done in History in the last 40 years and many outstanding works have been produced during this period, broadening the scope of the subject remarkably. The writings of the historians who exemplified a new approach to history and the great historiographical breakthrough they accomplished are well reflected in the curriculum followed in the universities of premier institutions like Jawaharlal Nehru University. But in Tamilnadu as a result of half hearted attempt on the part of the administrators and for want of competent teachers to attend to the task, we find the college curriculum fragmented, incoherent, and insubstantial. In many instances the up-to-date reading list is not provided. Even if provided by the Board concerned, it is not put to use by the teachers and in consequence what was taught forty years ago is still imparted in class rooms. The examination pattern being followed does not reflect the enrichment of syllabus attempted. The questions in the University examinations are asked rather mechanically than intelligently. Eventually the well meaning efforts made by some universities in introducing curriculum change in history have been nullified because of the non-availability of standard text books, in English as well as in vernaculars.

The Committee headed by Rajan Gurukkal, former Vice-Chancellor of Mahatma Gandhi University, constituted to revamp the under-graduate curriculum in colleges in Kerala in late 1990s pointed out yet another factor for the sad state of history. The Rajan Gurukkal Committee held the alarming gap between the state of our syllabus and level of research in the discipline responsible for the deplorable state. Arguing that this was hardly the case in pre-independence India, the Rajan

⁴ P.V. Indiresan, "A Different Degree," in *Beyond Degrees*, p. 88.

⁵ A.P.J. Abdul Kalam, 'Knowledge into Power,' in *Beyond Degrees*, p. 22.

Gurukkal Committee observed: The research work of Vincent Smith that had appeared during the first decade of the century entered undergraduate syllabi in the second decade, while R.C. Majumdar and K.A. Neelakanta Sastry who had written in the thirties were absorbed into the mainstream by the forties. Considering this, our syllabus should articulate the state of art of the eighties. This has not happened and by our conservative estimate, we are half-a-century out of date.

There have been voices of concern over the artificial division and also attempts to see social problems in their economic political and cultural dimensions since 1960s. The report of Immanuel Wallerstein (*Open the Social Sciences: The Gulbenkian Commission on the Restructuring of Social Sciences*, 1996) has underscored the point that one cannot meaningfully study a problem in one of the social sciences without regarding the perspectives from the other. Blackburn observed in *Ideology in Social Sciences: Readings in Critical Social Theory*: 'Right from the outset the division of labour between various social sciences (economics, sociology, anthropology, history, political science) parcels up investigation in such a way as to prevent the underlying determinants of social formation coming into view.... Liberal political theory ignores the basic economic forces, while economics becomes a technical exercise which neglects and obscures class relations. History rarely ventures beyond a timid empiricism while sociology soars into empty abstraction.'⁶

The splitting and reformation of disciplines is a frequent occurrence in the USA, as formally excluded fields are added while existing fields extend their coverage. New Departments are created along with new scholarly journals and new professional associations. In 1997 when I was Fulbright Fellow at New York University I was told that there were more than thousand journals in Mathematics. Psychology had split into forty five major specializations. India cannot afford to this luxury of splitting up of faculties into increasingly specialized institutions and hence interdisciplinary learning and research are the only hope for production of knowledge in global standard.

The Gulbenkian Commission Report's recommendation for four structural developmental paths namely bringing scholars together for a year's work in common themes, establishing integrated research programme cutting across traditional disciplinary boundary lines, joint appointment of faculty members where everyone is appointed to two departments- the one in which he or she has the degree and the other in which he or she has evinced interest- and finally to persuade graduate students to work jointly in two separate departments and make it compulsory for doctoral students to work in two departments should be seriously pursued and translated into a reality. At a time when universities are caught in a corporate culture and forced to respond to the new technologies and to the challenge of scarce resources and when the academics are increasingly finding it difficult to cooperate on interdisciplinary themes even the viable suggestions of the Gulbenkian Commission seem to be far-fetched.

In centres, both inside and outside the formal system, where recruitment procedure has been rigorous there has been excellence and efficiency in the performance of teachers and researchers. But in majority of the Institutions, three forms of parochialism are said to be operating. First parochialism is identity politics. Here the claims of caste or region or religion play an important role. The second is based on ideology- that is appointing intellectuals more amenable to one's own political ideology. A third form of parochialism is institutional. There is a tendency to employ one's own graduates to teaching positions. This in-breeding has infected even the best departments in the best universities and colleges. Whether based on identity, or ideology or institution, these varieties of parochialism have made the task of maintaining a word class faculty formidable.⁷

Explosion in Engineering education has impacted in the quality of teaching in Colleges of Engineering in our own state. During 2015-16 nearly one lakh seats fell vacant in various degree

⁶ Quoted in D. Narasimha Reddy, Restructuring Social Science Research, unpublished paper presented at the 26th meeting of the Heads of the Departments of Social Sciences in South Indian Universities held at MIDS, Madras 31, January, 1997.

⁷ Ramachandra Guha, "Crucibles of Modernity," *Beyond Degrees*, pp. 8-9.

courses of the 530 private self-financed Engineering Colleges. Professor V.C. Kulanthaisamy, former Vice-Chancellor of Anna University, recalls how during M.G.R.'s regime in the late 1970s AICTE refused permission to start one government Engineering college and one government polytechnic in Tamil Nadu. But as we all know the same AICTE in the wake of Government's commitment to neo-liberalism indiscreetly approved new engineering colleges throughout the country, resulting in production of unemployable engineering graduates in the country.

The lesson we learn is that we must formulate out higher education policy based on our own requirements and experiences. We should not allow markets and globalization to shape it. Only then we can seize the opportunities and progress in the right direction avoiding the dangers unleashed by markets and globalization.

Excellence in Teaching and Learning through Holistic Approach

Dr.V.Ambedkar*

“Teaching is an intimate contact between a more mature personality and less mature one which is designed to further the education of the latter”-H.C.Morrison [1934].

Introduction

The progress of time reveals that teaching is become more challenging than ever before and it now relies highly on the commitment and quality of individual endeavors one is able to exercise to provide quality education. Now it is so essential that teaching should frequently incorporate the innovative changes and teachers can keep enjoying their career by keeping pace with the new knowledge and technological advancements. They have to continuously refine their teaching methods, strategies and approaches and seek to expand their repertoire, deepen their knowledge, strengthen the skills and remain inventive. They cannot remain dormant with a set of fixed teaching style, instead should be ready to incorporate all new ideas and methods developed each time into their teaching style. By sustaining a personal motivation to contribute, the best into the student's life and an urge to develop self-initiated quality practices for the betterment of student's life will be the strongest characteristics towards professional excellence.

Marks of good teaching

Sri Aurobindo describes the marks of good teaching in these words. “The first principle is that nothing can be taught. The teacher is not an instructor or task master; he is a helper and guide. His business is to suggest and not to impose.

Albert. Einstein (1879-1955) has observed, “It is the supreme art of the teacher to awaken joy in creative expression and knowledge.

Following are the marks of good teaching:

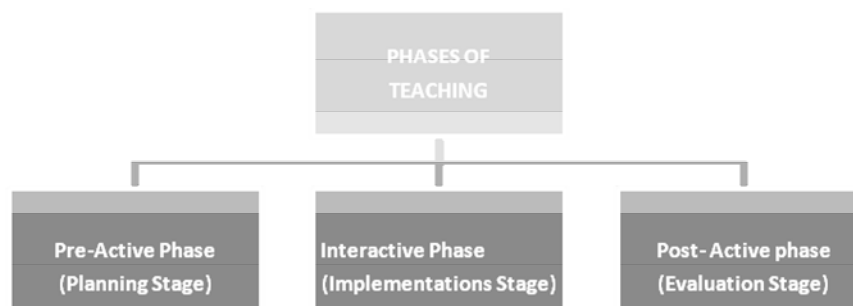
Good teaching- is enabling the student to learn through his own efforts, It is providing appropriate activities and experiences for learning, It is motivating his students to learn, it involves skill in guiding learning. It is cooperative, student – centered, democratic and humanistic. Good teaching provides desirable and selective information, helps the student adjust himself to his environment. It is dynamic, forward looking and progressive looking. Good teaching is leading to emotional stability of the students. It is both diagnostic and remedial. And it is careful planning. Good teaching, in other words, liberates the students and his mind.

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Structure of teaching: three variables

1. Teacher as an independent variable.
2. Students as dependent variables.
3. Content and the strategy of presentation as intervening variables.

The phases of teaching



Learning to teach more and more effectively will continue because there will be still more and so much to learn. A scientific approach and planning at every stage is necessary to satisfy the goal of education. The ongoing research is yielding large inputs into this field and teachers as educational practitioners has to be always ready to ‘learn to teach’ and ‘teach to learn’ embracing to the growing knowledge base.

Major areas of teaching like effective instructional methods and practices, special strategies for improving the behaviours of the learners, proper assessment of student’s progress, relationship with partners in the field, enhancement of subject knowledge and professional development needs impetus in the form of thinking, planning and practice. The role of teacher is not just impart knowledge through the best-suited methods of teaching, but also to stimulate, guide and encourage the learner to acquire knowledge by themselves. Students appropriate motivated to learn by the teachers can be seen making efforts to obtain the best and refined knowledge from all sources and thus growing up mentally and responding well to the encountered challenges.

The essence of effective teaching that can add lasting flavour to student’s learning is mainly dependent on the personal teaching characteristics upheld by the teacher. To import knowledge in an influencing manner and make learning more meaningful, teachers have to concentrate on few personal and teaching characteristics and making necessary changes, such changes are incorporated to inspire a passion for learning in students. The following factors will help the teachers to enhance the effectiveness of their teaching.

Mastery of subject matter

The foremost requirement, which is the base for an influencing and effectual teaching, is teacher’s knowledge of the subject matter. Just by obtaining the information for teaching from the prescribed text books, will not just be enough to provide a satisfying knowledge base to them. Especially in this era of knowledge explosion when they are easily accessible to different types of tools of information technology, teacher’s success in classroom teaching is greatly decided by the enriched mastery of the subject. It is obvious a professional challenge that teachers have to uphold and ensure that the students feel that their teacher possess deeper understanding of the subject matter. Otherwise, there will be many discouraging and frustrating situations to be confronted in front of today’s more bright students.

In order to accept the challenges posed by the students with advanced knowledge and the intellectually gifted students and prove your competence, it is necessary to upgrade the subject knowledge from time to time.

Certain valued guidelines to the teachers that take into consideration the prominence of deep knowledge of the subject taught, and proclaiming the manner of its organized use are:

Know clearly all the different topics from the subject taught. This first hand understanding of the subject topics helps in accumulating the necessary knowledge, and systematically planning the instruction.

Habit of extensive reading will contribute richly to the accumulation of subject knowledge. Look for opportunity to interact with colleagues, subject experts, field experts to discuss about the topics for which you want more knowledge and understanding.

Greater understanding from the subject will further help in systematically organizing the information to be taught at par with the level of student's ability and intellectual development.

When you organize your subject matter for teaching, there should be special consideration for gifted students, slow learners and for those with learning disabilities.

Being passionate about your subject will give you more and more insight into your subject and enables you to select the best methods and approaches to teach your subject, conduct impressive discussions, project work and activities. Better understanding of the subject taught is necessary for responding well to student's questions.

Deeper subject knowledge will enable you to know about the scope of the subject, inter-disciplinary links and relations and develop innovative subject development programmes and activities.

You should attend orientation programmes, refresher courses to broaden the understanding of the newly included concepts of your subject and thus teach the concepts with ease in the class rooms.

Always teacher's mastery of the subject taught will create an impression about the teacher in the mind of the students, make them like the subject and thus leave a positive mark on the teaching.

Application of the principles of teaching

The present day Education depends upon four pivotal concepts namely, teaching, learning, curriculum and the learning environment. These four are the imperative needs for fulfilling the educational objectives viz, Learning to know, learning to do, learning to live together and learning to be. Of the pivotal concepts the main agent to activate the process of education in an organized manner, is of course the teacher himself. Teaching is an important part of the process of Education. Its special function is to impart knowledge, develop understanding and skill. Teaching is usually associated with 3 R's i.e, Reading, Writing and Arithmetic – imparting knowledge of learning subjects, Education, on the other hand, has a wider connotation in terms of 7 R's i.e Reading, Writing, Arithmetic (Denoting the learning subjects) and Rights, Responsibilities, Relationship and Recreation (new requirements and ideals of a democratic set up).

In teaching we limit our outlook omitting those more important means of education. Be absolutely clear before each teaching task about what subject matter is to be taught and what objectives you would like to accomplish. A teacher should know clearly about

What to teach? and what not to teach?

How to teach? and How not to teach?

When to teach? and when not to teach?

Where to teach? and where not to teach?

Why to teach? and why not to teach?

Teaching is a relationship which is established among three focal points in education – the teacher, the student and the subject matter. Teaching is the process by which the teacher brings the student and the subject-matter together. The teacher and the taught are active, the former in teaching and the latter in learning. Modern teaching is not a mechanical process. Teaching is not ‘telling and testing’. Teaching is the complex art of guiding students through a variety of selected experiences towards the attainment of appropriate teaching-learning goals. Teaching should foster the development of strong attitude, habits, discipline, character, life skills and self-esteem in them.

Relationship with the students

A students-centered teacher establishes a good, caring and encouraging relationship with the students. This will enable them to respond well to the student’s unique capabilities, needs, and thus create a positive classroom climate.

Followings are some useful strategies that promote and establish a caring, supportive and healthy teacher-student relationship:

Make the students to feel that you are really interested in their progress and whatever they do is really importance to you. Whenever they suffer some sorts of adjustment problems, stress problems, be kind enough to respond to them immediately emphasizing your concern towards them. Give them recognition and rewards they deserve for all their genuine efforts and achievements. Encourage them to build confidence, reinforce strong characters and to respect others. Give due consideration for their ideas, feelings, emotions, and show them that you really care them. Do not harshly blame or comment about their character especially in front of others. Appropriate and controlled humour can bring teacher and students close together narrowing the distance. All caring responses from the teacher and respectful responses from the students when hooked together, it results in a healthy teacher-student relationship.

Conclusion

The teacher with conscious, planned efforts should work for qualitative improvement of the student’s learning. Incase, if anyone is feeling that in spite of all efforts, or everything tried, still nothing much is happening, then do not be discouraged, instead keep working on your approach and attitude. Eventually with time, things will change and your efforts will surely serve the purpose. Eliminate all negative thoughts deeply ingrained in mind and those degrading defects in your profession. Forget about all those times you have failed, and concentrate on the present that lies ahead. Pile all your abilities, experiences and talents over effective classroom teaching, and surly, you will be recognized as an effective teacher.

“Be Happy and keep the learners Happy”

“Be a burning candle for lighting another candle”

The Class Room Experience

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India is a country of larger diversity in cultural and socio-economic structures with very high population of around 125 crores. However, it has its unique position in the world map with the high volume of young people, who are the real work force for the future development. Institutions of higher learning like colleges, universities and technical institutes in India have bigger responsibilities to empower the students with highest level of skill and competency. Such empowered young aspirants make their living with dignity and deliver the best for the human kind as well. In this context the experience acquired by students at the college level will make an ever-lasting impression in rest of their career. This experience is a cumulative of academic ambience, interaction with teachers and fellow students etc. It is needless to emphasis that this experience is predominantly derived from class room. Since the potential and academic skill of faculty members are the bricks-and-mortar of an educational institution, creating a long-living class room experience for the students rests with the faculty members. In this talk we discuss various methods and strategies along with modern tools to enhance the class room experience. The challenge for the faculty members of academic institutions is to make the most of all methods and tools in creating class room as a place to instill the excitement of learning, and not the burden of learning.

Teaching, Learning and Development-An Integrated Approach for Quality Higher Education

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Introduction

Higher education is a multi-dimensional and complex process based on the interrelationship of both teachers and learners. It may be easy to enlist inputs, procedures, methods and outputs in the teaching and learning process, but difficult to grasp the interaction of inputs and throughputs, and what exactly determines the outputs. If any one of the components misses thread to connect, the whole process of integrating teaching with learning and development may fail. Approaching teaching, learning and development in three different perspectives may be stopped as if teacher at teaching end always conflicts with learners at learning end. When this conflict becomes severely wider, the learning may cease to take place. Defining objectives of higher education and arriving at the clear-cut vision of the institution would help mitigate the severity of barriers in attaining the desired quality. The objectives may differ from one institution to another institution or from one condition to another condition but there should be consensus. UNESCO (2006) states that there is no consensus on the exact objectives and so is quality of higher education. The clarity on higher education is a need of this hour whether or not it is meant to produce qualified manpower, or as training for research career or as a matter of life chances. While coming to quality, the many questions may unfold that it is set as something exceptional or conforming to highest standards or as fitness for purpose or as a way through to fulfilling stakeholders' expectations and needs. Given the fact that the objective and quality are well defined, the measuring interaction of inputs, throughputs and outputs may become an easy task. This paper examines different inputs, procedures, process-components and outcomes in a typical teaching and learning process of higher education aiming for high quality.

Integration of Teaching with Learning and Development

Integrating teaching with learning and development is an old concept in education at all levels, primary to higher education. Integrated approach of teaching allows learners to explore, gather, process, refine and enquire about the topics the learner wants to study and understand. Integrated approach helps learners engage in a purposeful and meaningful learning and development. Evolving an integrated approach requires meticulous teaching plans with well-tailored course objectives and outcomes, ability and involvement of learners, methodology suiting to topics and environment, inter connectedness of units and syllabus and evaluative methods. Application of these components with the right attitude of teachers and learners may fetch the desired result of holistic development among students. Enormous efforts in teaching and learning will undoubtedly go in vain if the minimum level of development is not attained. Quality of teachers, intelligence and efforts of learners, leaning need analysis, planning learning, implementing learning and evaluating learning are the key components that involve in successful integration of teaching with learning and development which are discussed as follows:

Teachers as an Integrating Component

Teacher is the one who is not only qualified over subject and philosophy, but also exposed to handling different types of learners. He should have passion for teaching with background that he must have chosen teaching as his only choice but by chance. He is expected to possess thorough knowledge of subject, curriculum, course objectives, and programme objectives. Class room management is a skill whereby the teacher controls class while teaching by getting attention of all students. A teacher should be aware of his students belonging to VARK (Visionary, Auditory, Writing and Reading Preference and Kinesthetic). While teaching, his teaching style must match with learning style of learners.

A good teacher is the one who uses learning time effectively by appropriating time among three phases of teaching: pre-instructional, Instructional and post-instructional. Pre-instructional includes exchanging pleasantries, recapitulation of major points discussed in the previous sessions, particularly last session, introducing topic for the session, and informing course objectives and outcomes of the topic of session. Instructional phase explains and elaborate the topic with suitable examples, experimentations and case studies whereas post-instructional includes interacting with students on clarification of ideas and doubt-clearing. The teacher may use this phase to assess to what extent the students have understood the concept by asking a few questions and may conclude session with a summary disclosing the session to be handled in the next successive session.

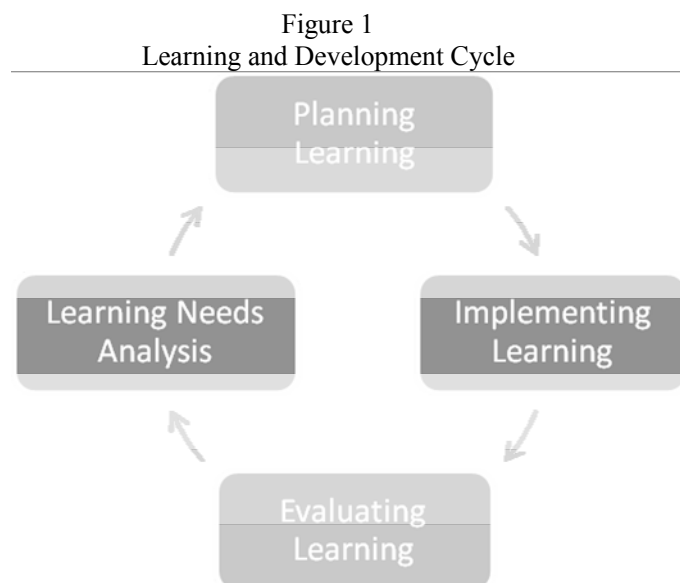
Students as an Integrating Component

Integrating teaching with learning and development becomes successful when there is no pre-matured evaluation of students stamping on each one like, intelligence and slow learners. Intelligence and slow learning may be relative. A student who is very good in mathematics may perform very poorly in social science and a student who is brilliant in natural science but terribly weak in mathematics. Hence, a teacher through various evaluative methods, formative and non-formative, needs to learn learners and understands which level they stand at a taught course. Students play a vital role apart from teachers through continuous searching of information, interpreting, communicating and process learning to both others and themselves. A good teacher makes enormously good students. The approach of teacher always serves as bridge that connects teaching with learning. For instance, integral to the model of integrated learning is the **inquiry approach**. Inquiry approaches allow for students to construct meaning using their prior knowledge on a subject, and new knowledge gained during the learning process.

The best outcome for teaching and learning requires high quality interaction between learners and teachers. The exchange of different ideas and strategies can be beneficial to all students. This exchange of different strategies allows the students to look at problems through another's perspective. Johnson (2009) found that it is important to pay attention to type of students placed together in groups. Some students can work with many other students, but there will always be those few who have difficulty contributing to a group atmosphere. It is also very important to teach the students how to work cooperatively together.

Learning and Development Process

Learning and development is not an end but a process that involves (i) Learning Need Analysis, (ii) Planning Learning, (iii) Implementing Learning and (iv) Evaluating Learning (Figure 1).



Source: 101 Learning and Development Tools, Fee Kenneth (2011)

Learning need stems from learners guided by his vision. Identifying learning needs is the prime task in integrating teaching with learning and development. At background study, the teacher must know the learners' size, geographical distribution, income level, literacy, gender, language, cultural background of learners and existing knowledge of the topic. Furthermore, analysing the question on "what learner wants to learn, why he wants to learn and very importantly how, where and when he applies his knowledge probably help teachers or trainers identify learning needs. Clarifying learning needs in such a way that strategies may be determined to meet those objectives.

Once the learning needs are identified, the teacher needs to plan, design and prepare learning interventions. Adopting learning methods is one aspect that has to be decided at this stage. Learning methods includes Brain Storming, Interview, Buzz Sessions, Demonstration, Expert Speaker, Glossary, Lecture, Listening teams, Readings, Tests, Concept Maps, Game-based Learning, Project-based Learning, Case-based Learning, Problem-based Learning, Scenario Comparison, Simulation, Discussion Forums, Role play and Follow-up. Implementing learning while supporting learners is a crucial step in integrating teaching with learning and intervention. Learning development cycle ends with evaluating the effectiveness of learning intervention and outcomes while measuring learners' satisfaction.

Learning Outcomes as an Integrating Component

Educational outcomes are some of the most influential determinants of current and future well-being. Evidence shows that highly educated individuals are more likely to have better health and higher earnings than the less well educated. From an aggregate perspective, a well-educated workforce is also crucial for raising productivity, ensuring resiliency and adaptability to the changing needs of the labour market but also for making use of innovation. Both the capacity to generate and absorb innovation are affected by the quality of the human capital, which in turn is often enhanced by the education levels of the workforce (OECD, 2016).

Learning outcomes includes general understanding of issues, get people working together to address the relevant issues, build greater knowledge of specific issues and approaches, apply the new knowledge, skills and attitudes to work environment, enhance specific skills necessary to implement the initiatives, facilitate interactions between knowledgeable persons to promote best practices and so on. Outcome across four parameters such as reaction, learning, behavior and results determines the effectiveness of teaching and learning process. Specific outcomes in terms of satisfaction level, relevance, change of behavior, change of knowledge, efficiency, quality, speed, cost and morale reveal the quality of the whole teaching and learning process starting from analysis of learning needs. If these outcomes are visible or seen among the learners, the magic word, "development" may be said to be successful.

Conclusion

Teaching, learning and development are naturally integrated. Learning objectives and outcomes that underpin teachers, methods, procedures, culture, environment and learners are pivotal in guiding, monitoring and evaluating the teaching and learning process. It may be any mode of delivery--face to face, video conferencing, e-learning, media but focusing on objectives and outcomes throughout the process may sustain the purposeful and meaningful learning and development. The degree of contribution from these interacting components may vary from one level of education to another level of education. Learners in higher education play more important role in integrating teaching with learning and development as compared to those learners in primary and high school education where teachers' role comes in a big picture. Nonetheless, every phase in teaching, learning and development process requires meticulous planning, precise intervention, conducive climate, effective materials, compatible tools and methods and importantly the intellectual, emotional, mental and spiritual combination of teachers and learners for successful integration of teaching with learning and development.

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Factors that influence the Usage of E-resources among the Members of the Faculty of Arts and Science Colleges

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Introduction

Electronic information resources have become an integral part of library collections in academic libraries and its usage have also increased with time and it has become an inseparable part among the academic community consists of students, faculty and research scholars. In particular, libraries attached to the higher educational institution as well as Arts and Science Colleges to fulfil their information needs especially for teaching, learning and research. Advancement of ICT and its related technology helps the faculty members to access e-resources beyond the four walls of the library, made it is universal access to scholarly communication around the globe and wide accessibility of their scholarly literature vice-versa. .

Electronic Resources

Electronic resources are the electronic representation of information sources. Electronic resources are becoming very important these days since they are more up-to-date, and can be accessed anywhere, crossing all geographical boundaries. Electronic resources are systems in which information is stored electronically and made accessible through electronic systems and computer based networks. It has significant value in research for the researchers while conducting Research and Development activities.

E-resources include online databases, sources from web pages, e-journals articles, electronic personal papers, e-mail messages, news paper postings, newsletters, government publications, electronic theses and dissertations, e-news papers, CDs/DVDs and things of similar kinds either at free of cost or on payment.

Conceptual Framework

The conceptual framework of the present study is Technology Acceptance Model (TAM) propounded by Davis (1989). TAM assumes that *usefulness* and *ease-of-use* are the key determinants of technology selection and user *attitude* is placed between usefulness and ease-of-use and *use intention*. The TAM model is applicable to all those area where the system is based on technology. E-resources are information system in which the retrieval is based on series of technology. The present study investigated the effects of the characteristics of e-resources on behavioural *intention to use* e-resources. Since users tend to find quality information to solve their research problems, the researcher assumed that improved resource quality would lead to increased user intention to select e-resources. Characteristics of e-resources are a multifaceted concept that consists of multiple constructs such as accessibility, credibility, currency, coverage, and format (Stvilia, Mon & Yi, 2009). The present study posits five constructs to represent the resource quality on e-resources based on characteristics of e-resources. They are *accessibility*, *coverage*, *credibility*, *currency* and *format*.

Need and Significance of the Study

The ICT based technological developments have forced the library and information centres to e-resources from traditional print resources, more specifically to online and internet based applications for accessing and retrieval of information. Now-a-days, users especially in academic libraries of higher educational institutions preferred e-resources than the print sources due to its flexibility in accessing current information and usefulness of e-resources. There are several individual factors such as age, attitude towards modern devices, anxiety in handling electronic gadgets, lack of proper guidance, lack of self interest; techno-phobia and lack of internet accessibility influences the usage of e-resources positively as well as negatively. No doubt, the internet is a boon for higher education and it is a facilitator for qualitative teaching, learning and research. Several studies have

been conducted on various aspects related to electronic journals and usage e-resources at various level both at national and international level among different user groups. Studies have been carried out among the college teachers on teachers approach to internet information sources (Saravanan & Mary, 2007), among the faculty members of United Arab Emirates University on the usage of electronic resources (Ibrahim, 2004), and representative studies on factors that influence the use of library resources by the faculty members at Technological Educational Institution of Thessaloniki (Korobili, Tilikidou; Delistavrou, 2005), barriers faced by the faculty members of Engineering Colleges (Hariharan & Saravanan, 2015). But a closer analysis of the available studies shows that factors that influence the usage of e-resources among the members of the faculty Arts and Colleges are scanty. The present investigators have realised the felt need to fill this gap and hence motivated to conduct a survey based study among the members of faculty of Arts and Science Colleges on the factors that influence the usage of e-resources.

Statement of the Problem

Members of the faculty of Arts and Science Colleges uses e-resources more frequently for their information requirements related to teaching, learning and research. The intensity of using e-resources are influenced by several factors. The present study is intended to identify the factors that influence the use of e-resources among the members of the faculty of Arts and Science Colleges and hence the problem for the present study is entitled as “**Factors that influence the Usage of E-resources among the Members of Faculty of Arts and Science Colleges**”.

Objectives of the Study

1. To identify the familiarity of e-resources among the members of faculty of Arts and Science Colleges
2. To identify the frequently used e-resources by the members of the faculty of Arts and Science Colleges.
3. To analyse the factors that motivates the members of the faculty of Arts and Science Colleges while using e-resources.

Hypotheses of the Study

Hypotheses framed for the study are:

1. Familiarity of e-resources is more among the members of the faculty of Arts and Science Colleges.
2. There is no significant correlation between TAM variables, characteristics of e-resources and personal variables.

Limitations of the Study

Limitations of the study are:

1. The present study is limited only to the factors of TAM variables, characteristics of e-resources and selected personal variables.
2. The present study is limited only to the members of the of Arts and Science Colleges only, faculty members of Engineering Colleges and other colleges in the higher education system are excluded from the study.

Methodology

The present study is descriptive and analytical in nature and hence survey method is adopted among the members of faculty from Arts and Science Colleges. The secondary data like review of literature and other information are collected from the books, journals, magazines, newspapers, and report of research studies.

i. Population of the Study

The study is intended to identify the factors that influence the usage of e-resources among the members of faculty from Arts and Science Colleges. Thus, the population for the present study is members of faculty from Arts and Science Colleges in Kanyakumari District.

ii. Sample of the Study

The present study is based on the opinion of 281 respondents of the faculty from Arts and Science Colleges. Therefore, sample for the study is 281 faculty members from Arts and Science Colleges.

iii. Tools Used for the Study

The tool used for the study is a well structured questionnaire prepared by the investigator in consultation with experts after conducting a pilot study. It includes demographic variables of the respondents; questions measuring various aspects related to user behaviour on e-resources; information literacy, opinion on e-resources especially on usefulness and ease-of-use; attitude and intention to use e-resource; quality parameters namely accessibility, coverage, credibility, currency and format.

iv. Data Collection

The questionnaire is administered among 400 members of faculty of 22 Arts and Science Colleges in the district belonging to different subjects of various disciplines. Selection of the sample is done on the basis of stratified random sampling technique by giving due weight-age to various personal variables such as designation, gender, locale, discipline, years of experience, experience, and familiarity of computer. The collected questionnaires are edited, the incomplete ones are removed and finally 281 questionnaire are complete in every respect is selected for analysis. The response rate of the questionnaire is 80.3 per cent.

v. Statistical Techniques Used

Both the inferential and descriptive statistics are used for analysis and interpretation of data. The statistical techniques used are: Percentage Analysis; Descriptive Statistics like Mean, and Standard Deviation; Inferential statistics like 't' test for independent means, and One way ANOVA; Karl Pearson Product moment method of correlation (r), and Step-wise Multiple Regression analysis. The collected data are analysed using SPSS (Software Package for Social Sciences) version 17.0 and interpreted accordingly.

Analysis and Interpretation of Data

The collected data are analysed and presented under various subheadings.

1. Demographic Variables

Majority of the respondents are female (61.2 per cent) and the remaining are male. Also, majority of the respondents hails from rural background (54.1 per cent) and the remaining 117 out of 281 from urban background. Moreover, 144 out of 281 of the respondents of age group between 30-40 years, and 72 out of 281 of age less than 30 years. Moreover, 134 out of 281 (47.6 per cent) respondents belong to Science, 30.2 per cent belong to Arts and 22 per cent belongs to Social Science. Experience of the faculty also reveals that 40.2 per cent of the respondents have experience between 5-10 years, 37.7 per cent of the respondents have experience up to five years and 14.5 per cent have experience more than 10 years.

2. Familiarity of E-resources

Familiarity of e-resources among the members of faculty of Arts and Science are rated in a three point scale namely 'well familiar', 'somewhat familiar' and 'not familiar'. The familiarity of e-resources among the faculty is summarized in table 1.

Table 1
Familiarity of E-Resources

S.No	Familiarity of E-resources	Respondents	Per cent
1	Well Familiar	122	43.4
2	Somewhat Familiar	159	56.6
3	Not Familiar	0	0
Total		281	100

Source: Primary Data

Table 1 reveals that majority of the respondents (56.6 per cent) are well familiar with the e-resources, and 43.4 per cent are somewhat familiar with e-resources.

3. Frequency of using E-resources

The frequency of using e-resources by the faculty depend on various factors such as type of research and teaching activities in which they involved in the college including their day-to-day teaching, learning and research activities. The frequency of using e-resource by the members of faculty of Arts and Science Colleges is in table 2.

Table 2
Frequency of using E-resources

S.No	Frequency	Respondents	Per cent
1	Daily	137	48.8
2	Two to Three times in a week	115	41
3	Once in a week	18	6.4
4	Once in a Fortnightly	6	2.2
5	Once in a Month	5	1.8
Total		281	100

Source: Primary Data

Table 2 indicates that most of the faculty (48.8 per cent) use e-resources daily for their day-to-day teaching and research activities. However, 115 out of 281 respondents (41 per cent) use e-resources two to three times in a week, 6.4 per cent of the respondents use at least once in a week, 2.2 per cent of them use at least once in fortnightly and 1.8 per cent uses at least once in a month.

4. Reasons for using E-Resources

E-resources are accessed by the members of the faculty for various reasons ranging from day-to-day teaching and research activities. The various reasons for accessing e-resources by the respondents of the study are summarized in table 3.

Table 3
Reasons for using E-resources

S.No	Reasons for using E-resources	Respondents	Per cent
1	Teaching	212	75.4
2	Research	212	75.4
3	Undertaking/supervising project	171	60.8
4	Scholarly Communication	185	65.8
5	Current Information	239	85.0
6	Updating knowledge	197	70.1

Multi-response item

Table 3 shows the reasons for using e-resource by the members of faculty of Arts and Science Colleges based on multi-response questions. Reasons for using e-resources by the members of the faculty are in the order as follows: current information (85 per cent), teaching (75.4 per cent), research (75.4 per cent), for updating knowledge (70.1 per cent), for scholarly communication (65.8 per cent) and for undertaking/supervising projects (60.8 per cent).

5. Frequently used E-resources

There are varieties of e-resources to meet the information requirements of the members of the faculty of Arts and Science Colleges. The frequency of using e-resources by the faculty members are assessed based on their rating on three point scales namely, frequently, sometimes and never. The opinion of the respondents is given in table 4.

Table 4
Frequency using E-resources by Faculty Members

S.No	Frequency of using e-resources	Frequently	Sometimes	Never
1	E-Journals	158(56.3)	90(32.0)	33(11.7)
2	E-Books	99(35.3)	143(50.9)	50(17.8)
3	Databases	96(34.2)	135(48.0)	50(17.8)
4	Reference Sources	68(31.4)	170(60.4)	23(8.2)
5	Technical Reports	106(37.7)	132(47.0)	43(15.3)
6	ETDs	54(19.2)	156(55.6)	71(25.2)
7	Conference Proceedings	114(40.6)	119(42.4)	48(17.0)
8	Discussion Groups	97(34.5)	142(50.5)	42(15.0)
Total		281		

Source: Primary Data

Table 4 reveals that 56.3 per cent of faculty from Arts and Science Colleges frequently use e-journals; 35.3 per cent and 50.9 per cent of the faculty are respectively uses e-books ‘frequently’ and ‘sometimes’. E-databases are more frequently used by the faculty (34.2 per cent); similarly, e-reference sources are more frequently used by the faculty members (31.4 per cent). Similar trend is prevailed among other e-resources too, technical reports (37.7 per cent), electronic theses and dissertations (19.2 per cent), conference proceedings (40.6 per cent) and discussion groups (34.5 per cent).

6. Correlation between TAM Variables and Characteristics of E-resources

Work environment and information requirements of the faculty members are vary from one institution to another, discipline to discipline. Hence, the factors that influence the use of e-resources among the members of the faculty of Arts and Science Colleges may also vary. Thus, the inter relationships between TAM variables and characteristics of e-resources are carried out and the details are given in table 5.

Table 5
Correlation between TAM Variables and Quality Parameters of e-resources

	Usefulness	Ease of Use	Accessibility	Coverage	Credibility	Currency	Format	Attitude
Ease of Use	.398**							
Accessibility	.410**	.375**						
Coverage	.453**	.299**	.447**					
Credibility	.539**	.227**	.424**	.419**				
Currency	.423**	.245**	.391**	.569**	.494**			
Format	.278**	.122**	.299**	.501**	.291**	.556**		
Attitude	.488**	.418**	.372**	.387**	.353**	.385**	.490**	
Intention to Use	.396**	.114	.400**	.305**	.606**	.398**	.122*	.145**

** is significant at 0.01 level

* is significant at the 0.05 level

The table 5 shows the inter correlation between the TAM variables and quality parameters. The correlations between the variables have significant positive correlation at 0.01 level. The extent

of correlation between them is only at moderate level. This helps to predict the factor that influences the use of e-resources.

Testing of Hypothesis

Hypothesis: There is no significant correlation between TAM variables and characteristics of e-resources.

Table 5 shows that correlation exists between the variables and are significant at 0.05 level. Therefore, the hypothesis is rejected at 0.05 level.

7. *Correlation between the Demographic variables and TAM variables, Quality Parameters*

The correlation between the demographic variables of the respondents with the TAM variables and characteristics of e-resources is calculated using correlation technique. The details of correlation analysis are given in table 6.

Table 6 shows gender of the respondents has significant negative correlation at 0.01 level with intention to use. Similarly, age has significant positive correlation with currency; type of institution has significant negative correlation with usefulness, attitude and intention to use e-resources; discipline of the faculty has significant positive correlation with coverage; and possession of computer by the respondents has significant negative correlation with usefulness, accessibility, coverage, credibility, currency, attitude and intention to use e-resources. The extent of correlation is very low and negligible.

Table also indicates that information literacy of the respondents has significant positive correlation at 0.05 level with usefulness, ease-of-use, attitude and intention to use e-resources of TAM variables and accessibility, coverage, credibility, currency and format of quality parameters. The extent of correlation between information literacy with ease-of-use, accessibility, coverage, currency and attitude is only at low level. Similarly, the extent of correlation between information literacy with usefulness, credibility and intention to use is at moderate level.

Testing of Hypothesis

Hypothesis: There is no significant correlation between TAM variables, characteristics of e-resources and personal variables.

Table 6 shows that there is no significant correlation between the demographic variables and TAM variables and characteristics of e-resources except information literacy. Therefore, the hypothesis is accepted except information literacy.

8. *Regression on Analysis of Factors predicting Intention to use e-resources among the Members of the faculty of Arts and Science Colleges*

The factors that influence the use of e-resources among the members of the faculty of Arts and Science Colleges are studied using step-wise multiple regression analysis. The details of regression statistic along with B coefficients and beta coefficients are in table 7.

Table 7: Factors Predicting the Intention to Use E-resources

Model No	Variable	R	R ²	Adj. R ²	B	β	t
1	Credibility	.606	.367	.365	.464	.606	12.721
2	Credibility Accessibility	.626	.392	.388	.408 .137	.532 -.175	10.29 3.38
3	Credibility Accessibility Attitude	.637	.406	.400	.432 .166 -.085	.563 .210 -.182	10.71 3.97 -2.57
4	Credibility Accessibility Attitude Currency	.646	.418	.409	.396 .149 -.101 .122	.517 .189 -.157 .129	9.28 3.53 -3.02 2.33
5	Credibility Accessibility Attitude Currency Format	.656	.471	.421	.392 .154 -.081 .185 -.111	.511 .196 -.125 .197 -.143	9.25 3.69 -2.35 3.22 -2.52

Table 7 reveals that the model five has emerged as a best model to determine the use e-resources among the members of the faculty of Arts and Science Colleges. In model one, the variable credibility of e-resources alone be emerged as variable to determine the use e-resources among the faculty members. The variable credibility significantly determines 36.5 per cent of the total variance of behavioral intention to use e-resources. In model two, there are two variables namely credibility and accessibility together determine 38.8 per cent of the total variance explained of behavioral intention to use e-resources among the faculty members.

In the same way, in model three, there are three variables namely credibility, accessibility and attitude together determines 40 per cent of total variance explained. In model four, the variables namely credibility, accessibility, attitude and currency together determines 40.9 per cent of the total variance explained of behavioural intention to use e-resources among the faculty members. In model five, five variables namely credibility, accessibility, attitude, currency and format together determines 42.1 per cent of total variance explained in use of e-resources among the members of the faculty of Arts and Science Colleges. Also the beta coefficients are positive which shows that these factors contributed positively. Thus, the factors namely credibility, accessibility, attitude towards e-resources, currency, and format influences the use of e-resources among the members of the faculty of Arts and Science Colleges.

Findings of the Study

Based on the analysis, the following are the findings:

1. Majority of the members of the faculty from Arts and Science Colleges (56.6 per cent) are well familiar with the e-resources, and 43.4 per cent are somewhat familiar with e-resources.
2. Most of the faculty (48.8 per cent) use e-resources daily for their day-to- day teaching and research activities.
3. Reasons for using e-resources by the members of the faculty are in the order as follows: current information (85 per cent), teaching (75.4 per cent), research (75.4 per cent), for updating knowledge (70.1 per cent), for scholarly communication (65.8 per cent) and for undertaking/supervising projects (60.8 per cent).
4. Majority of the members of the faculty of Arts and Science Colleges frequently use e-journals.
5. There is no significant correlation between the demographic variables and TAM variables and characteristics of e-resources except information literacy.

6. Credibility, Accessibility, Attitude towards e-resources, Currency, and Format of e-resources are the factors that influence the use of e-resources among the faculty members of Arts and Science Colleges.

Conclusion

The study reports the survey conducted among the members of faculty of Arts and Science in Kanyakumari District on the factors that influence the use of e-resources. The study reveals that members of the faculty are familiar with e-resources and e-journals is the most frequently used e-resources. Faculty members have average level perception towards TAM variables and on quality parameters. Credibility, accessibility, attitude, currency, and format of e-resources are the factors that influence the use of e-resources among the members of faculty of Arts and Science Colleges.

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Evolving Technologies in Education – Implementing A Moral Education Curriculum and Accessing It's Impact on Students Behaviour

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ABSTRACT:

Everyday students are exposed to violence, dishonesty and other social problems in the media and the real world. Moral education refers to help students acquire those virtues or moral habits that will help them individually live good and at the same time become productive, contributing to the members of their communities. In this view moral education would contribute not only to the students as individuals but also to the social cohesion of a community. Teaching moral values to youngsters is easy. However, to make them value what they learnt is not. A total of 100 undergraduate students participated in this study. A qualitative case study approach using questionnaire as used to investigate the changes after the implementation of moral education (pre and post). Based this study it was concluded that ethical theories learnt in the classroom are not sufficient to equip them with learning of moral. The findings indicated that the students acquire important moral values from the project such as teamwork, responsibilities, confidence, respect and appreciation of life. Learning moral gave students a positive impact. Moral education is used to understand the concepts of life, able to relate to the differences in others and nurtured their self confidence. The purpose of the study is to explore the impact of moral education on college students.

Key words: Moral education, Moral values, Implementation

Importance of Teaching Physical Education using ICT in Modern Era

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1. Introduction

We know that healthy mind lies in healthy body. Now a day's video games and computer games have taken the place of our traditional games. Man does not have time to play indoor or outdoor games in the modern age of technology. Sport is important for man's all round development and for living healthy life. Today very fast changes are seen in the field of physical education. First of all man gets physical education and then gets social education. Thus man's social education has the basis of physical education. Today it has become technological education. Thus very deep change is seen in education. The education has become so much dependent on technology that man does not spare enough time to take care of his or her body which is a very valuable gift of nature to man. Man has stopped physical exercises because of technological tools and other facilities. Previously man used to remain healthy by playing various outdoor games and thereby doing physical exercise. Now the games are played on computer so the life has become idle. The body has become the storehouse of various diseases. Physical education makes the immunity of our body stronger and so makes body more beautiful.

2. Importance of Physical Education

2.1 Helpful for Natural Development

Man's body develops very naturally from the prenatal stage to the old age. When this natural development is accompanied with some physical exercises it improves the energy level of the body. Considering this fact even special body exercises are suggested for the pregnant women. In the same way there are different types of exercises for different age stages like infant, adolescent, young, adult and old age. This exercise becomes like a supplement to natural development in scientific way. The balanced emotional development is possible only with good body health and development. It can be considered as a fundamental use of physical education.

2.2 Body Charm

Beautiful body is considered as the first step towards success in life. Therefore people do so many efforts for well figured body. The beauty of the body depends on healthy muscles. Body can be well shaped through physical exercise just as an expert sculpture brings out a beautiful idol by carving an ordinary stone structure. The secret of charming body lies in the muscles of the body. From the very ancient time sculptures have been giving the importance and value to the beauty of the body. Keeping that image of beautiful and handsome body in our mind, we can also mould our body by giving enough exercise to the muscles. Thus we can get proper advantage of physical education.

2.3 Strong and Healthy Body

We can make our body stronger and healthier through physical education. The significance of strong body lies in the happiness that we get after doing some hard physical or mental work. In other word for a strong person hard work does not remain a matter of tiredness. The reason of physical weakness found in the society is that physically man is not strong and healthy. Man feels weakness and tiredness even after small physical work. Its psychological effect takes place that man does not stand for any physical work. Therefore on the large scale the society has to suffer as a lack of work efficiency and willingness for that. But the truth is that the peace and happiness of fresh life is possible only through hard work. It is physical work and effort through which we can fulfill our all the basic needs. Strong body is always healthy. Strong and healthy body can protect itself from various diseases because its immunity also remains strong. Healthy man can suffer hardness of all the seasons whether it is hot or cold or rainy season. In short, he can enjoy the pleasure of all things in nature.

2.4 Boosts the Self Confidence

There is no doubt about the advantages of physical education for strong and healthy body. Therefore the saying is also heard that healthy mind resides in healthy body. A healthy body is the gateway for reaching the Supreme soul. Strong and healthy body can give boost strength and increases the self confidence. And for the man who is full of self confidence even the problems become a game playing.

He can pass his life with full happiness and peace of mind. It will become a service to humanity, if this psychological secret of advantage of physical education is spread and attract the people towards it

2.5 Development of Discipline

Physical education develops not only self discipline but also supports to maintain external discipline on man. Discipline is as important as the food for life. People with uncontrolled behaviour deny any kind of restriction and control. But they don't know that the real freedom lies in restriction. The pain of restriction itself becomes the pleasure of freedom. Physical education is a never failing key to bring discipline. Self discipline comes in man while concentrating on and following different rules of the games. This self discipline comes into action through different activities and arts and thereby creates interest in life. Well organized life style leads man towards living happy and peaceful life.

2.6 Character Building in Life

The presence of the three qualities- energy, character and beauty in life is very important for being a complete man in Indian culture. Energy and beauty are the direct advantage of physical education but indirectly it builds character too. Character can be developed well by physical education. The process of character building through physical education is so gradual that it can not be seen directly but can be felt. All the weaknesses from man's life fall down like the dry leaves from the tree. The ideal form the culture and the civilization of any nation and society is developed through good character. All the vices like violence, wars, jealousy, unhealthy competitions, hatred, etc. give way to the character.

2.7 Constructive Use of Time

It is man's natural desire that he or she wants relaxation from work. In the state of relaxation man neither works too much nor takes complete rest but he combines both the work and the rest. In combining the rest and the work, most of the people waste time in gossiping, playing card games, and other useless activities. Physical education provides new option in place of such useless activities. And this option is always healthy. Today there are entertaining games and skills available for playing. The saying "One way for Two" comes to true when man gets both the physical advantage and the entertainment through physical education. In this way physical education becomes the best means of entertaining activity or time pass during the spare time.

2.8 Helpful for Awareness in Society

Physical education is helpful for creating intimacy with society. In physical education team spirit is very important. Team is like a family. It is a miniature form of society. Team is the centre where the person gets opportunity to know the importance of co operation with other people. According to the saying "With One Hand No Clap", the person can not get complete advantage of physical education on his own. This limitation motivates man to co operate with others. Thus man develops faith in the feelings of communality and oneness with others. This faith becomes a part of man's character and connects man with his or her family, society, nation, and the world. Physical education prepares an ideal citizen unknowingly and unintentionally. And such ideal citizen breathes in the air of freedom in the society being free from limited narrow mindedness. He creates happiness not only for himself but also for the society. Thus people devoted to the society, nation and the world can be prepared through physical education.

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Quality Assurance in Higher Education

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INTRODUCTION

Quality as a process suggests that in order to achieve quality of a product or service, it must undergo certain processes and conform to the procedural requirements. Thus, quality is the outcome of systems and procedures laid down for the purpose. The last one –quality as a culture –recognizes the importance of organizational view of quality as a process of transformation, where each entity is concerned and acknowledges the importance of quality. In educational institutions we are particularly concerned with the latter, though all other ideas of quality too have their respective places. Subsuming a wide range of discussions, Barnett (1992) quotes a ‘suggestive’ definition by Barrow (1991) to define ‘quality’ in higher education.

CONCEPTS OF QUALITY

‘Quality’ is a much-debated term. To some it is like ‘beauty’ that lies in the eye of the beholder! Those who believe in this are ‘relativists’, whereas those who believe quality can be specific attributes that can be identified, they are ‘objectivists’. The word quality comes from the Latin word *qualis* meaning ‘what kind of’. With a variety of meanings and connotations, it has been referred to as a ‘slippery concept’ (Pfeffer and Coote, 1991). To illustrate the slippery and elusive nature of quality and the confusion associated with it many authors (Nigvekar, 1996; Warren et al, 1994; Sallis, 1996) have referred to the highly cited words of Pirsig (1974).

QUALITY MOVEMENT IN INDIAN HIGHER EDUCATION

The University Grants Commission (UGC) with its statutory powers is expected to maintain quality in Indian higher education institutions. Section 12 of the UGC Act of 1956 requires UGC to be responsible for “the determination and maintenance of standards of teaching, examinations and research in universities”. To fulfill this mandate, the UGC has been continuously developing mechanisms to monitor quality in colleges and universities directly or indirectly. In order to improve quality, it has established national research facilities, and Academic Staff Colleges to re-orient teachers and provide refresher courses in subject areas. The UGC also conducts the National Eligibility Test (NET) for setting high standards of teaching.

DIMENSIONS OF QUALITY IN HIGHER EDUCATION

Quality, as we know so far, was originally developed in the manufacturing industry. In the area of higher education, the adoption of quality control has been superficial and diluted by the exercise of academic freedom (Largosenet al, 2004). Further, the prevailing culture of universities is often based on individual autonomy, which is zealously guarded (Colling and Harvey, 1995). Thus, it is usually difficult to apply the features of quality to higher education considering the fact that quality requires teamwork (Boaden and Dale, 1992). However, the quality of higher education is very important for its stakeholders. Notably, providers (funding bodies and the community at large), students, staff and employers of graduates are important (Srikanthan and Dalrymple, 2003). In this section, we will discuss quality from the perspective of three groups and distil a common framework for the dimensions of quality in higher education based on Owlia and Aspinwall (1996). The most commonly grouped dimensions of quality are product, software and service.

HOW CAN QUALITY BE ASSESSED?

Quality assurance is the responsibility of everyone in an educational institution, though the top management sets the policies and priorities. Thus, assuring quality should be a continuous and ongoing process. It should not be considered as a onetime activity for accreditation alone. However, accreditation as external quality monitoring (EQM) can be found in all types of higher education systems (Harvey, 1998). In spite of the importance of EQM and the credibility attached with the

impartial and objective system, developing an internal quality assurance mechanism in every educational institution is highly important. It is in fact, this unit within the higher education institution that will prepare the base for EQM. Thus, understanding the criteria of quality assurance and adhering to the best practices become highly significant. Across the world quality assurance is done in the following ways:

SELF-EVALUATION

Peer review by a panel of experts, usually including at least some external panel members and one or more site visits; Analysis of statistical information and/or use of performance indicators or the best practices benchmarking; Surveys of students, graduates, employers, professional bodies; Testing the knowledge, skills and competencies of students (Harman, 1998) At NAAC, a four-stage process of external quality monitoring/assessment is undertaken covering: Identifying pre-determined criteria for assessment; Preparation and submission of the self-study report by the unit of assessment; On-site visit of the peer team for validation of the report and recommendation of the assessment outcome to NAAC; and Final decision by the Executive Committee of NAAC (NAAC, 2005).

UNIT OF ASSESSMENT

Quality assurance and accreditation can be performed at different levels, though the institutional quality assessment model is quite popular in India. Many academics believe that in institutional accreditation, the strengths of good departments and weaknesses of poorly performing units cannot be categorized. Thus, these set of intellectuals favour department-level and programmer-wise accreditation. Though such assessment results would be highly useful to the stakeholders, they are practically difficult. However, NAAC recognizes that institutional and department/ programmer level assessments are not alternatives, but are mutually complementary to each other.

SUMMARY

In this section, we discussed the three major ways of assuring quality – self-evaluation, best practice benchmarking, and external quality monitoring. Self-evaluation is a process of continuous improvement and much widely used in institutions. In order to capitalize on the internal quality and to add value to the quality assessment, external quality monitoring/ assessment is preferred all over the world. Thus, many countries use EQM as the strategy to assess the quality of educational institutions. We also highlighted the market driven approach to quality assessment through rankings done by media organizations, and emphasized questionable reliability of their processes and the lack of consensus in their criteria and weight given, making them less useful

CONCLUSION

In this module, we discussed various issues related to understanding of quality assurance in higher education. Higher education is at the cross roads. At one end there is high demand for access to higher education, and at the other the quality is questioned. In order to survive in the competitive world of globalization, all higher education institutions should pay special attention to quality in higher education. NAAC has taken a number of steps to promote the quality of Indian higher education. To this effect, it undertakes assessment exercises through self-assessment, peer review and site visits. This module also intends to prepare better-trained individuals on quality in higher education.

In this module, we defined quality as a social construct that can be defined in terms of exceptional (exceeding high standards and passing a required standard); in terms of consistency (exhibited through “zero defects” and “getting right the first time”, making quality a culture); as fitness for purpose (meaning the product or service meets the stated purpose, customer specifications and satisfaction); as value for money (through efficiency and effectiveness); and as transformative (in terms of qualitative change) The history of quality movement in the industry was discussed and the contributions of Deming, Juan and Crosby were analyzed to provide insights into the conceptual developments from quality inspection to total quality management. We discussed

quality from three different perspectives – Product (output of the educational institution), Software (processes in the educational institution), and Service (the activities that have direct impact on student satisfaction). In doing so, we discussed quality in the systems perspective and identified three different aspects of quality – input, processes and outputs. Having analyzed various aspects of quality, we discussed various ways of quality assurance that include self-evaluation, best practice benchmarking and external quality monitoring. The external quality monitoring is the most popular means of quality assurance, though self-evaluation is normally in-built in the process. In order to do self-evaluation and external quality monitoring, we need several tools of quality assurance.

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A Study on Students' Perspective on Usage of Ict in Teaching and Learning Process

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1. INTRODUCTION:

Information and Communication Technology (ICT) has suffused in every walks of life influencing the technology fields such as enabling satellites, business, commerce, and also social networking. In this fast-growing and fast-changing digital era, teaching becomes the most challenging profession all over the world, where knowledge is expanding and exploring quickly and much of it is available to students as well as teachers at their learning environment . To meet the educational needs of the Gen Z society, active learning, critical thinking, problem solving skills, communication skills, information handling skills and self-directed learning are referred as twenty-first century skills. Researchers observed an orientation towards twenty-first century learning of teachers in some of the European countries, and a growing orientation in some Asian Countries, when comparing data of 1997 with data of 2006. Their observation shows that changes in national educational policies had an impact on teacher's orientation towards twenty-first century learning. Policy makers, leaders and researchers need to work together to inculcate the 21st century skills in curricula along with ICT to meet the challenges in teaching and learning in order to achieve learning objective.

2. RESEARCH QUESTION

In order to achieve the aim of the study , the main research questions for this study was:

What are third-year students' perceptions of the effect of the use of ICT on their learning?

The answer to this central question was sought in this study through finding answers to the following subsidiary questions:

- What perceived ICT skills do third-year students at the G.Venkataswamy Naidu College possess?
- What perceived purpose(s) are ICT skills used for as viewed by third-year students at the G.Venkataswamy Naidu College
- What perceived learning strategies do third-year students at G.Venkataswamy Naidu College adopt while using ICT?

3. RESEARCH METHODOLOGY

To address the research question, a study comprising empirical research was conducted. The empirical part of the study consisted of a student survey using descriptive data.

A non-experimental design using a limited survey and employing closed-ended questionnaires was used in this study. Questionnaires were administered to 120 third-year students at the G.Venkataswamy Naidu College to investigate how they perceive the use of ICT on their learning. Both Likert-type and single-choice type responses were rendered for students to rank themselves regarding their perception of their own ICT abilities. A census sampling of 130 third-year students was used for collecting data. One hundred and twenty questionnaires were distributed and seventy-three questionnaires were returned by participants.

4. FINDINGS AND DISCUSSIONS:

4.1 PROFILE OF THE STUDENTS (GENDER AND AGE)

Closed-ended questionnaires were distributed to one hundred and twenty third year students at the G.Venkataswamy Naidu College. There were 38 (50%) male and 38 (50%) female respondents, indicating that there was equal gender representation of male and female students as represented.

4.2 What perceived ICT skills do third-year students at G.Venkataswamy Naidu College possess?

4.2.1 Word processing, spreadsheet, email, internet and presentation Controlling for student perceptions on using ICT skills or computer applications was problematic as students were not directly observed using different ICT applications.

Overall, third-year students perceived themselves to possess good skills in all computer applications. Excellent ICT skills were perceived regarding word processing and internet skills, with over 45% of the students reporting to perceive their skills in this regard as excellent. Slightly lower perceptions of possessing excellent spreadsheet and email skills were reported (26% and 31% respectively). With reference to presentation, almost two thirds of the respondents indicated to perceive to possess excellent to good presentation skills. Internet and spreadsheet were perceived as the only ICT skills in which respondents have no capability (8% and 1% respectively).

In addition to the ICT skills, students were asked to also state their perceived level of ability to engage in online discussions, chatting and using computer software to work on their assignments. Findings are discussed as follows .

4.2.2 Online discussions

Almost 51% of the 75 students who answered this question indicated that they perceived themselves to possess good ability to engage in online discussion groups with other students. Only slightly over 9% of students indicated that they do not perceive themselves to possess ICT skills to engage in discussion groups.

4.2.3 Chatting

Students' perceived abilities to chat online are reported to be well below 50%. In this case, the highest ranked category was good (just over 43%), poor (just under 31%) and excellent (slightly over 14%). Whereas no capability (just over 11%) to engage in a chat online was the least ranked.

4.2.4 Computer applications

In general, the perceived ability of students to complete assignments using different computer applications appeared to be good. Students stated that they have good (slightly under 63%) and excellent (slightly fewer than 31%) abilities to complete assignments using computer applications, whereas only just over 5% and 1% respectively perceived themselves to possess poor and no ICT abilities.

4.3 What perceived purpose(s) are ICT skills used for as viewed by third year student at the G.Venkataswamy Naidu College?

4.3.1 Students' perceptions of the purpose of ICT

In general, third-year students reported good usage of ICT for functional purposes. Thirty-seven third-year students (51%) reported that they very often use ICT for informative purposes. In this study, informative purposes implied that ICT is used by students to find and acquire information for learning. Second to an informative purpose, thirty third-year students (41%) reported that they use ICT often (twice or more a week) to manipulate existing information for educational purposes. Lower figures were reported by students for using ICT for communication (15%) and entertainment (12%) purposes respectively.

Therefore it indicates higher scores for purposes of educational use, whereas lower scores are indicated for non-education purposes, such as communication and entertainment. In summary, it appears that third-year students at the G.Venkataswamy Naidu College use ICT more for informative, functional and creative purposes rather than for entertainment. Apparently students perceive these three purposes as more educational compared to entertainment purposes. In this context, entertainment use of ICT may be perceived by third-year students at the G.Venkataswamy Naidu College as meant for purposes of leisure and therefore as less likely to be used.

4.4 What perceived learning strategies do third-year student teachers at the Caprivi College of Education adopt while using ICT?

4.4.1 Students' perceptions of learning with ICT

The use of ICT in teaching and learning may be too complex to determine in a once-off cross-sectional survey as in this study. To determine students' perceptions of their beliefs and attitudes, and how these might change over time, will require a longitudinal study. This is partly because beliefs and attitudes need time to change and cannot be determined over short periods of time unless drastic interventions occur. To find out how students currently perceive their learning where ICT is used, they were asked to rank themselves on a scale of 1 to 4 on the question whether they perceive themselves to be learning with ICT.

A high proportion of third-year students (79%) definitely agree that they were learning with ICT. Another 18% agreed in this matter and it seems as if students overwhelmingly agree that ICT enhances their learning.

Students were asked to state their level of agreement or disagreement with regard to their perceptions of studying with computers on a scale of 1 to 4.

The findings reveals that high proportions of students (88%) agree or definitely agree that studying with computers enhances their learning.

4.4.2 Students' perceptions of integrating ICT into their subjects

This finding reveals that more third-year students (almost 60%) agree that the integration of ICT into subjects enhances the quality of their learning, whereas almost 41% of the students perceived ICT integration in subjects not to enhance the quality of learning.

4.4.3 Students' perceptions of learning with Traditional Learning Methods (TLM)

Findings from this question reveal that 97% of the respondents definitely disagreed or disagreed about studying or learning with traditional learning methods rather than with ICT. Only 1% of the respondents perceived traditional learning methods as an appropriate method for studying. These findings corresponded with the findings where only 2% of students indicated negative perceptions about learning with ICT.

4.4.4. Students suggestions on how the College could support them in their use of ICT for learning

Third-year students were asked to suggest the kind of institutional ICT support from the college that they perceived might enhance their learning. Findings were grouped according to possible categories such as access, facilities, training and technical support. The findings reveal that ICT facilities (44%) and access to ICT (27%) were indicated by students as areas where support is needed most. Training and technical ICT support were least indicated (18%) and (11%) respectively.

6. Conclusions

Based on the empirical findings in this study, a number of conclusions might be drawn.

Firstly, findings from the study suggest that third-year students at the G.Venkataswamy Naidu college have positive perceptions regarding their ICT skills and related computer applications. As a result of these positive perceptions, students also perceive the use of ICT as enhancing ICT skills that possibly encourage them to engage in deeper forms of learning.

Secondly, the study found that third-year students agree that the use of ICT in their major, minor and core subjects possibly encourages them to engage in deeper forms learning. These positive perceptions seem to be attributed to the fact that most third-year students perceive themselves as possessing good ICT skills, which are necessary for effective learning in higher education.

Thirdly, findings from this study further suggest that third-year students at the G.Venkataswamy Naidu college have negative perceptions of studying or learning through traditional learning methods only. What further supports this conclusion is that a majority of third-year student teachers have positive perceptions about using ICT in their learning and it seems that students more readily use ICT for informative and functional purposes which appear to be of educational value and might enhance deeper forms of learning.

Impact of Multimedia and Animation in Teaching and Learning Process

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Introduction

Educators continually search for more effective ways to engage their students during learning as well as to increase student learning outcomes. Various technologies have been touted as being able to provide the ultimate delivery mechanism to achieve these laudable goals. However, while the technologies purporting to provide solutions are changing at an exponential pace, the true effect of these technologies on learning outcomes remains unclear. The multitude of student (individual) variables plus the myriad of content and situational variables interact with the delivery mechanisms in such a way as to confound the applicability of many of the research results.

WHAT IS THE ROLE OF ANIMATION IN MULTIMEDIA LEARNING?

One of the most exciting forms of pictorial presentation is animation. Animation refers to a simulated motion picture depicting movement of drawn (or simulated) objects. The main features of this definition are as follows: (1) picture – an animation is a kind of pictorial representation; (2) motion – an animation depicts apparent movement; and (3) simulated – an animation consists of objects that are artificially created through drawing or some other simulation method. In contrast, video refers to a motion picture depicting movement of real objects. Similarly, an illustration is a static picture of drawn (or simulated) objects whereas a photo is a static picture of real objects. When used mainly as a form of entertainment, an animation can be called a cartoon, but in this review we focus on the potential of animation as an educational tool. Does animation promote learning? Do students learn more from animation than from other modes of presentation? Should we increase the use of animation in educational programs? These questions fit within a classical tradition of media research, in which the goal is to determine whether students learn better with one medium compared with another. However, media researchers have concluded that media research questions such as these are largely fruitless (Clark, 1994; Kozma, 1994; Ross, 1994; Salomon, 1979/1994). The consensus among media researchers is that animation may or may not promote learning, depending on how it is used. For these reasons the search for media effects has been called off. In its place is a search for the conditions under which various media, such as animation, affect the learning process. Taking a learner-centered approach, we aim to understand how animation can be used in ways that are consistent with how people learn. Instead of asking, “does animation improve learning?” we ask “when and how does animation affect learning?”

HOW DO PEOPLE LEARN FROM WORDS AND PICTURES?

In designing multimedia presentations involving animation, instructional designers base their decisions on a theory of how students learn. In this section, we explore two competing views of how students learn from words and pictures.

Information Delivery Theory of Multimedia Learning

A straightforward theory is that learning involves adding information to one's memory (see Mayer, 1996, in press). According to this theory, the computer is a system for delivering information to learners. The instructional designer's role is to present information (e.g., as words or pictures, or both) and the learner's role is to receive the information. For example, when an explanation is presented in words (such as narration) the learner can store the information in memory. Adding pictures (such as animation) should have no effect on what is learned if the pictures contain the same information as the words. Thus, according to this strict version of the information delivery theory, multimedia presentations should not result in better learning than single-medium presentations. However, if some learners prefer visual presentations and others prefer verbal presentations, then a multimedia presentation would be effective in delivering information effectively to both kinds of learners. In this way, learners could select the delivery route they prefer. Thus, according to a lenient version of the information delivery theory, multimedia presentations should result in better learning than single medium presentations.

Cognitive Theory of Multimedia Learning

The cognitive theory of multimedia learning is based on three assumptions suggested by cognitive research: (1) dual-channel assumption –the idea that humans have separate channels for processing visual/pictorial representations and auditory/verbal representations (Baddeley, 1998; Paivio, 1986); (2) limited capacity assumption – the idea that only a few pieces of information can be actively processed at any one time in each channel (Baddeley, 1998; Sweller, 1999); and (3) active processing – the idea that meaningful learning occurs when the learner engages in cognitive processes such as selecting relevant material, organizing it into a coherent representation, and integrating it with existing knowledge (Mayer, in press; Wittrock, 1974).

Narration enters via the ears, so the learner selects some of the words for further processing in the verbal channel, organizes the words into a cause-and effect chain, and integrates it with the visual material and prior knowledge. Animation enters via the eyes, so the learner selects some of the images for further processing in the visual channel, organizes the images into a cause-and-effect chain, and integrates it with the verbal material and prior knowledge. According to this theory, the cognitive process of integrating is most likely to occur when the learner has corresponding pictorial and verbal representations in working memory at the same time. Instructional conditions that promote these processes are most likely to result in meaningful learning. As you can see, this theory predicts that multimedia presentations (such as narrated animation) are more likely to lead to meaningful learning than single-medium presentations.

HOW SHOULD ANIMATION BE USED WITHIN MULTIMEDIA PRESENTATIONS?

A Collection of seven research based principles for the design of multimedia presentations involving animation with lists of each of the principles, along with a summary of supporting research studies are as follows. For each study, we compared the problem-solving transfer performance of college students who learned with and without a certain condition (such as temporal coordination of animation and narration). Specifically, we computed an effect size as the difference between the mean transfer scores of the groups divided by the standard deviation of the group that did not receive the condition. We used transfer as our measure of meaningful Learning (or learner understanding) because transfer taps students' ability to use what they have learned in new situations.

Multimedia Principle

The first principle is that students learn more deeply from animation and narration than from narration alone. The theoretical rationale for this principle is that students are better able to build mental connections between corresponding words and pictures when both are presented (i.e., animation and narration) than when only one is presented (i.e., narration) and the learner must mentally create the other. In each of four experiments, adding a pictorial explanation (i.e., animation) to a verbal one (i.e., narration) resulted in a substantial improvement in learners' problem-solving transfer performance. **The median effect size was 1.74, indicating a strong and consistent effect.** In these studies, animation enhanced student understanding of scientific explanations of how pumps work, how brakes work, or how to add and subtract signed numbers. In short, we have consistent evidence for the multimedia principle that words and pictures are better for promoting learner understanding than are words alone. Not all animations are equally effective in promoting understanding in learners. So each of the next six principles focuses on the difference between effective and ineffective uses of animation.

Spatial Contiguity Principle

The second principle is that students learn more deeply when on-screen text is presented next to the portion of the animation that it describes than when on-screen text is presented far from the corresponding action in the animation. The theoretical rationale is that learners are better able to build mental connections between corresponding words and pictures when they are near each other on the screen.

Temporal Contiguity Principle

The third principle is that students learn more deeply when corresponding portions of the narration and animation are presented at the same time than when they are separated in time. The theoretical rationale is that learners are better able to make mental connections when corresponding words and pictures are in working memory at the same time. In all eight experimental tests that we conducted, involving explanations of how brakes work, how pumps work, how lightning forms, and

how human lungs work, students performed better on tests of problem-solving transfer when animation and narration were presented simultaneously than when they were presented successively (i.e., entire animation before or after entire narration). **The median effect size was 1.30, indicating a strong and consistent effect that we call the temporal contiguity effect.**

Coherence Principle

The fourth principle is that students learn more deeply from animation and narration when extraneous words, sounds (including music), and video are excluded rather than included. The theoretical rationale is that the learner may attend to the irrelevant material and therefore have less cognitive resource available for building mental connections between relevant portions of the narration and animation. For example, we added extra verbal details or interesting video to an explanation of how lightning works or we added background music and environmental sounds to an explanation of how lightning or brakes work. In five out of five experimental comparisons, Students performed better on problem-solving transfer tests when they studied animation and narration without rather than with extraneous words, video, or sounds. **The median effect size was 0.90, indicating a strong and consistent effect that we call the coherence effect.**

Mayer and Moreno Modality Principle

The fifth principle is that students learn more deeply from animation and narration than from animation and on-screen text. The theoretical rationale is that the learner's visual channel might become overloaded when words and pictures are both presented visually, that is, learners must process the on-screen text and the animation through the eyes, at least initially. Thus, the learner might not have much cognitive capacity left over to build connections between words and pictures. In contrast, when words are presented through the auditory channel (as narration) then the visual channel is less likely to become overloaded, and learners are more likely to be able to build connections between corresponding words and pictures. In six of six experimental comparisons, involving explanations of how lightning forms, how brakes work, and how plants grow, students were better able to transfer what they had learned to new problems when animation was accompanied by spoken words (narration) than by printed words (on-screen text). In all cases, the corresponding animation and words were presented simultaneously. **The median effect size was 1.17, indicating a strong and consistent effect, which we call a modality effect.**

Redundancy Principle

The redundancy principle is that students learn more deeply from animation and narration than from animation, narration and on-screen text. It is based on the same theoretical rationale as the modality principle. In two experiments, we compared the problem-solving transfer performance of students who studied an explanation of how lightning forms from animation and corresponding narration versus from animation with corresponding narration and on-screen text. In both studies, receiving less—animation and narration—resulted in better transfer performance than receiving more—animation, narration, and on-screen text. In all cases, the corresponding animation and words were presented simultaneously. **The median effect size was 0.77, indicating a moderately strong and consistent effect, which we call the redundancy effect.**

Personalization Principle

The final principle is that students learn more deeply from animation and narration when the narration is in conversational rather than formal style.

WHAT IS THE FUTURE OF ANIMATION AS AN AID TO MULTIMEDIA LEARNING?

This review shows that animation has great potential to improve human learning—especially when the goal is to promote deep understanding. However, in order to effectively use animation it is useful to understand how people learn from pictorial and verbal media. Our seven principles are based on a cognitive theory of multimedia learning and are tested in rigorous experimental studies. Yet, our principles should not be taken as rigid procedures to be followed in all situations. Instead, multimedia presentations should be designed in ways that promote the cognitive processes required for meaningful learning, namely selecting, organizing, and integrating one. In the new millennium, pictorial forms of teaching are likely to continue to grow as a complement to verbal forms of teaching (Pailliotet and Mosenthal, 2000). Animation is a potentially powerful tool for multimedia designers,

but its use should be based on cognitive theory and empirical research. This article provides research-based examples of ways in which animation can be used effectively to promote learner understanding. Our goal is to develop a cognitive theory of multimedia learning that will guide designers in effectively using animation in multimedia presentations. The future of instructional animation is bright to the extent that its use is guided by cognitive theory and research.

The need for making multimedia courseware

Besides being a powerful tool for making presentations, multimedia offers unique advantages in the field of education. For instance, text alone simply does not allow students to get a feel of any of Shakespeare's plays. In teaching biology, an instructor cannot make a killer whale come alive in a classroom. Multimedia enables us to provide a way by which learners can experience their subject in a vicarious manner. The key to providing this experience is having simultaneous graphic, video and audio, rather than in a sequential manner. The appeal of multimedia learning is best illustrated by the popularity of the video games currently available in the market. These are multimedia programmes combining text, audio, video, and animated Graphics in an easy-to-use fashion.

Moreover, under conditions of chronic under-funding, multimedia can provide an enhanced or augmented learning experience at a low cost per unit. It is here that the power of multimedia can be unleashed to provide long-term benefit to all. Multimedia enables learning through exploration, discovery, and experience. Technology does not necessarily drive education. That role belongs to the learning needs of students. With multimedia, the process of learning can become more goal oriented, more participatory, and flexible in time and space, unaffected by distances and tailored to individual learning styles, and increase collaboration between teachers and students. Multimedia enables learning to become fun and friendly, without fear of inadequacies or failure.

Use of multimedia in an educational setting

Let us say a student wants to write a paper on desert animals. Traditionally, the primary source for obtaining information would be the encyclopedia generally available in the library. With access to interactive multimedia, the student would collect various textual materials about the camel from sources on a CD-ROM. In addition, the student may be able to copy a diagram or the skeleton and muscular structure of the camel and the ostrich to study what is common about the two creatures. With a multimedia approach, the student could also access Web sites on the Internet to get more information. The student could then add film clips on these animals in their natural habitat (all may be from the same CD-ROM) and blend them into a report. Then by adding titles and credits, the student now has a new and original way of communicating his/her own individual perspective.

Besides student use, teachers should find multimedia of great use in delivering their Lessons. For example, a history teacher could use a multimedia CD to create a lecture on the non-violence movement by using film clippings and audio tapes on Mahatma Gandhi or Martin Luther King, also by incorporating other audio visual information with text to make the subject come alive. All this material would be available on a videodisc.

Similarly, a university professor might use a multimedia CD to prepare or to update Information or to teach so as to enliven and also add insight to his/her teaching, thereby improving the quality of the course. The uses of multimedia need not be seen as a tool for classrooms only. In an industry dealing with hazardous materials, workers need to be trained. It could be risky to provide hands on training. In this case, simulated learning can take the place of actual hands on training by using all the features of interactive multimedia. Training can thus take place individually at the learner's pace and on his/her own time. Medical procedures, first-aid training and instruction of paramedics or even surgeons are made both simple and interesting through the use of multimedia. The doctor or paramedic can run through a complete procedure on videodisc and analyze all the possible outcomes and can evaluate the possibilities before treatment of the real life patient starts. In all the above instances, the user can and normally does work individually and in an interactive mode with the medium.

Conclusion:

Multimedia instructional design combines words and graphics to enhance learning effectiveness. Using Multimedia instruction can help learners engage in active learning. But again not all graphics are equally effective; we need to maintain balance, not to overuse graphics but integrate them to maintain the learning aim that we intend to take place. This concludes Choosing the best multimedia instructional for learning objectives depends on your instructional goals, stages of learning, and the learners' knowledge level who will participate. The communication functions of graphics category each serves a different purpose and is best aligned with specific instructional goal, stages of learning, and the learners' knowledge level.

Adventures of Modern Teaching

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1. Introduction: History of Teaching in Indian Tradition (Hindu Civilization) is the oldest in the world. We were the pioneers of teaching, both individual as well as an institution level by establishing World's first university from (Bharat) India Nalanda University. Our 'Gurukul' methodology is considered to be the best 'one – one' teaching approach even today.

During my own student days teaching is one of the noblest professions and considered to be the easiest of all other professions because of the following advantages;

- Teacher has only teaching job to do; least on administration related.
- More than 90% of the students understood the real meaning of obedience, respect and the purpose of visiting school.
- The society at large respected the teachers because they were considered to be the creators of future pillars of this country.
- More than 90% of the teachers adhered to their teaching schedule, quality of teaching, personal interest in developing students and even have become a role model or a mentor in their own way.

One of the worst phase of education was when the teaching fraternity called and participated in 'strike' which shook the society at large and it literally lost the social responsibility and undergone a massive transformation. Also when the population was increasing every decade and necessitated the need for increase in educational institutions which was aptly captured by greedy, jealous and all powerful politicians who in no time could start a college or school.

Barring one or two institutions, more than 80% of the educational institutions owned by politicians started commercializing the education by selling college seats at a premium price. Since it's the same politicians who ran the government, could overcome any adverse remarks and actions by statute bodies; the educational standards and quality started dwindling and at one point it started back firing to the extent to day when most of the engineering colleges starring empty class rooms and it's due to supply exceeding the demand disproportionately.

These are all the reasons which motivated me to choose this topic and I would like to highlight few challenges of teaching.

2. Effective Teaching Strategies

A teaching strategy is the method used to deliver information in the classroom, online, or in some other medium. The goal of a teaching strategy is to facilitate learning, to motivate learners, to engage them in learning, and to help them focus. Effective teaching strategies help to activate students' curiosity about a class topic, engage students in learning, develop critical thinking skills, keep students on task, engender sustained and useful classroom interaction, and, in general, enable and enhance the learning of course content.

Commonly used teaching methods may include lecture, class participation, demonstration, project-based learning, or memorization, but some combination of these usually results in the most effective strategy; that is, a strategy that engages a diversity of learning styles through varied instruction.

2.1 Lecture: Lecture is the process of teaching by giving spoken explanations of the subject that is to be learned. Lecturing is often accompanied by visual aids to help students visualize an object or problem.

2.2 Demonstration: Demonstrating is the process of teaching through examples or experiments. For example, a science teacher may teach an idea by performing an experiment for students. A demonstration may be used to prove a fact through a combination of visual evidence and associated reasoning.

Demonstrations are similar to written storytelling and examples in that they allow students to personally relate to the presented information. Demonstrations help to raise student interest and reinforce memory retention because they provide connections between facts and real-world applications of those facts.

2.3 Collaboration: Collaboration allows students to actively participate in the learning process by talking with each other and listening to other points of view. Collaboration establishes a personal connection between students and the topic of study and it helps students think in a less personally biased way. Group projects and discussions are examples of this teaching method. Teachers may employ collaboration to assess student's abilities to work as a team, leadership skills, or presentation abilities.

2.4 Learning by Teaching : In this teaching strategy, students assume the role of teacher and teach their peers. Students who teach others as a group or as individuals must study and understand a topic well enough to teach it to their peers. By having students participate in the teaching process, they gain self-confidence and strengthen their speaking and communication skills.

2.5 Experiential Learning : Experiential learning is the process of making meaning from direct experience, i.e., "learning from experience." Experiential learning focuses on the learning process for the individual. An example of experiential learning is going to the zoo and learning through observation and interaction with the zoo environment, as opposed to reading about animals from a book. Thus, one makes discoveries and experiments with knowledge firsthand, instead of hearing or reading about others' experiences.

3. Teaching Strategies to Deal With Disrespectful Parents

Different approaches differ in the level of teacher and student participation. We start describing these approaches from that approach with the highest to the lowest level of teacher direction or from the lowest to the highest level of student participation. As a challenge let us consider one situation in teaching and mentioned few suggestions to how to handle it.

We all know that every parent wants what they think is best for their child, that is understandable. However, making excuses and blaming others for their child's mistakes is not OK. It is our job as the teacher to resolve this difficult situation in a calm and collective manner. Here are a few teacher-tested teaching strategies to help you cope with a disrespectful parent, so if you are ever put into this kind of situation; you will be able to handle it with grace.

3.1 Plan ahead : If you are prepared to handle any kind of situation, it will make it a lot easier to handle. Try and think ahead of time what you would do, or how you might handle a situation like dealing with a disrespectful parent. If this type of situation arises, and you are taken off guard, then you will already be prepared mentally for it.

3.2 Record everything: If and when you get into an uncomfortable situation with a child's parent, then make sure that you document everything. Keep track of all communications that you have had with the parent, and keep it in a separate folder. Make sure that you write down the dates and times of each interaction or altercation that you have had. If the parent e-mails you, then save each e-mail as

well as your response to it. Keep this folder in a safe place that is easily accessible because you never know when you may need it.

3.3 Don't get caught off guard: There may be a time or two that a parent will catch you off guard and you may mistakenly say the wrong thing. Don't let this happen. Instead, be prepared and just tell the parent that you will get back to them with an answer soon. This will give you a chance to really think about what you want to say, as well as bounce some ideas off your colleagues on how you can go about answering the question.

3.4 Don't be afraid to walk away: If you encounter an overly confrontational parent and you feel that you are being put into an uncomfortable situation, then it is OK to walk away. An excellent example of this is when a 2nd grade teacher was talking to a parent who was acting in an extremely disrespectful manner, so the teacher decided to just walk away. The parent continued to yell at the teacher that she was going to the principal's office, so the teacher told the parent that was where she was headed, and that she could join her if she wished. In the end, the parent didn't follow, and the teacher that walked away left with her head held high. So, as a result, it is OK to get yourself out of any situation where you feel threatened or uncomfortable.

3.5 Back up all of your claims with facts: Make sure to always show a specific example of what you're talking about to get your point across. If you are dealing with a parent who is attacking your teaching methods and who thinks their child is being wrongfully accused, then you better make sure that you have concrete examples to back up whatever you are saying. Instead of taking their verbal abuse, prove them wrong and show them a specific example to illustrate your point.

3.6 Try and be sensitive: Always remember that the person you are referring to is someone's child. Put yourself in the parent's position and think about if you were in that situation, how would you like the teacher to respond to you? Try and sandwich your comments by acknowledging the child's strength before you move on to an area of concern.

3.7 Stop all communication: Just as the teacher felt it was OK to walk away in the example above, it is also OK to stop all communication with the parent. Only do this if it is absolutely necessary and you feel you have exhausted all other options. If a parent e-mails you, you can respond by just saying, "I have received your e-mail and thank you for letting me know your concerns for your child." If the parent wants to have a conference or would like a more in-depth conversation with you, then make sure to set it up at a time where the principal is available to be present.

3.8 Get your administration involved: If you have exhausted all of your options, then your last option is to get your administration involved. Just know that some things are out of your hands and that you did all that you could to make it work on your own.

Managing disrespectful, difficult parents is probably not what you thought you signed up for when you went into teaching. However, it's unfortunately part of the job. Instead of dwelling on how a parent may perceive you or what you could have done differently, acknowledge that you have done the best that you could and offer the parent a chance at a partnership so that their child can have a wonderful school year.

Teaching Technical Tools used in the classes:

It is important to **use technology in classrooms**, technology is made to simplify the way we do things, and so both **students** and **teachers** can benefit from the integration of **technology in the class room**. Some **educational technologies** are not expensive.

4.1 Smart Board - Smart Board in your classroom can enrich your curriculum by taking a typical lesson and turning it into a fun, more interactive one. Smart Boards are very easy to use and require very little maintenance. The boards do not use chalk or markers, but use your finger or a special pen. You will also find that it is easy to clean as well as maintain.

4.2 LCD Projector – A mounted LCD projector allows a teacher to share activities, videos, Power Point presentations, etc. from their computer with the whole class. In the technological age, an LCD projector is in a classroom. It is a powerful tool because it allows a single computer to become a powerful tool in a large group setting. A teacher can put an entire lesson together on a Power Point presentation and actively engage their students within the lesson by putting it up on the LCD projector.

4.3 Over Head Projector -The overhead projector facilitates an easy low-cost interactive environment for educators. Teaching materials can be pre-printed on plastic sheets, upon which the educator can directly write using a non-permanent, washable color marking pen. This saves time, since the transparency can be pre-printed and used repetitively, rather than having materials written manually before each class. The overhead is typically placed at a comfortable writing height for the educator and allows the educator to face the class, facilitating better communication between the students and teacher. The enlarging features of the projector allow the educator to write in a comfortable small script in a natural writing position rather than writing in an overly large script on a blackboard and having to constantly hold his arm out in mid-air to write on the blackboard.

4. Conclusion:

Giving your students well-crafted choices has the potential to have a powerful impact on their motivation toward school. Before deciding upon your lessons and activities, try asking yourself a few “Who, what, when, where, why and how” questions. Teachers are the main authority figure, Students are viewed as “[empty vessels](#)” whose primary role is to passively receive information (via lectures and direct instruction) with an end goal of testing and assessment. Teachers and students play an equally active role in the learning process with the availability of so many different strategies, teachers can determine what best suites their intended learning concept and apply it to their classroom setting. Teaching technologies or technical tools used in the class rooms will give better understanding of the subject, time saving and improves the technical and communication skills with both teacher and student.

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A Study on Enhancement of Education System in India through Learners Centered Environment – special references with Autonomous colleges.

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1.Introduction

Student is the main stakeholder of Educational System. Now -a-days we could feel that our students are more challenging phenomenon in current environment[1]. They are too innovative and enthusiastic in all activities. It is the responsibility of our educational system to fulfill their wishes and needs. Student can't be "taught"- they can only be helped to learn. In a student -centered classroom our role is help and encourage student to develop their skills, but without knowledge[2]. Our role as a teacher is to make sure that everyone benefits from the lesson, supporting one another. For example, in an English class room the room environment may be changed from thinking as I don't know the right word, so I can't say what I want to say "I don't know exactly the right words, but still I will try to find other words to say what I mean.[3]"

2. Student – centered Environment

The teacher – centered learning focus on the transmitting knowledge in turn student – centered learning focus on student learning and students empowerment.

The main principles of student – centered learning are

- ❖ The learner has full responsibility for his/her learning[4]
- ❖ Involvement and participation are necessary for learning[5]
- ❖ The relationship between learners is more equal promoting growth development[5]
- ❖ The teacher become as facilitator and resource person
- ❖ The teacher sees himself differently as a result of the learning experience

The above gives an idea about what is student – centered about what is student – centered environment.

A student – centered classroom students don't depend on their teacher words of approval, correction, advice or praise. They don't ignore each other but look at each other and communicate with each other. They value each other's contribution they co-operate learn from each other and help each other[6].

A student – centered classroom isn't a place where the students decide what they want to learn and what they want to do. It's a place where we consider the needs of the students, as a group and as individuals, and encourage them to participate in the learning process all the time.

- Here the students work together in pairs and groups, comparing and discussing their answers of reading to one another's written work and suggesting improvements.
- Interacting with the teacher and the whole class, asking questions on brain storming ideas[7].
- In a student – centered class students may be teacher – led.

A part from the above ideas a student wants a teacher be a facilitator but not a dictator.

3. Student – centered environment

- Students work to meet the objectives set by the teacher
- Students complete activities designed by the teacher to achieve goals determined by the teacher[8]

- Students respond to directions and step by step instruction from the teacher as they progress through activities
- Students are given extrinsic motivators like grades and rewards as a mean of motivating them to complete work [9]
- Students work in groups determined by the teacher – the teacher is in control of group members[10]
- Students work is evaluated solely by the teacher

Before entering higher education, most students learning experiences have been traditional and teacher – centered. Their teachers have typically controlled their learning, with little say about what and how to learn. For many students encountering a learner – centered environment will be new possibly unsettling; and may even engender resistance and hostility. One of the most critical difference between student – centered learning and teacher – centered learning is in assessment. In student – centered learning, students participate in the valuations of their learning. This helps the student to involve in deciding how to demonstrate their learning. Developing more assessment methods will support student – centered environment.

In this paper we have analyzed about the view of students regarding student – centered environment in few colleges located in southern Tamil nadu.

3. Objectives of the study:

3.1 Study made in autonomous colleges in southern districts:

- To know the students view regarding the existing system
- To know the students opinion about Students centered environment.

3.1 Methodology:

a) Research design:

This study is descriptive in nature. The researchers used both the primary as well as secondary data.

b) Data sources:

Primary data were collected from students of St. Xavier's College, St. Johns college, Sadak Appa tulla college, St. Joseph college Trichy, Very little secondary data relevant to the study was available.

c) Tools for data collection and analysis:

The tools used to collect data were questionnaire and interview schedule. The questions are asked by face to face interview with the respondents. Tools used for analysis is percentage method. Data presented in the form of tables and bar charts.

3.2 Sampling Technique:

Convenience Sampling method is adopted for selection of the sample. The size of the sample is one hundred and twenty.

3.3 Sex of the respondents:

Table No: 1

Distribution of respondents on the basis of sex

Particulars	No. of Respondents	Percentage
Male	82	68
Female	38	32
	120	100

Source: Primary Data

Table 1 shows that 68 percentage of the respondents are male and 32 percentage of the respondents are female.

3.4 Factors Influencing in selecting the College:

Table No: 2

Factors influencing in selection

Particulars	No. of Respondents	Percentage
Autonomous	31	25
Reputation	42	35
Availability of course	33	28
Others	14	12
	120	100

Source: Primary Data

Table 2 illustrates the factors influencing in selecting the college 25 percent of the students have this college for its autonomous status. 35 percent of the students have chosen for its reputation. 28 percent of the respondents have chosen this college for the availability of course and the 12 percent of the students have chosen this college for some other reasons.

Table no 6 shows out of 120 respondents, 73 percent are highly satisfied with the infrastructure, 22 percent of the respondents are satisfied with the infrastructure and only 5 percent of the respondents are not satisfied with the present infrastructure.

Table No: 4

Flexible Working Hours

Particulars	No. of Respondents	Percentage
Yes	24	20
No	96	80
Total	120	100

Source: Primary Data

Table no 7 reveals that out of 120 respondents, 20 percent of the respondents need flexible working hours and rest of the 80 respondents don't need flexible working hours.

3.5 Satisfaction level about existing system:

Satisfaction level of the students regarding existing system

Table No: 3.1

Syllabus

Particulars	No. of respondents	Percentage
Highly Satisfied	86	72
Satisfied	23	19
Not Satisfied	11	9
	120	100

Source: Primary Data

Table no 7 reveals that out of 120 respondents, 20 percent of the respondents need flexible working hours and rest of the 80 respondents don't need flexible working hours.

4. FINDINGS:

The following are the major findings of the study:

- 1) 68% of the respondents are male.
- 2) 35% of the respondents have chosen this college for its high reputation.
- 3) 72% of the respondents are highly satisfied with the current syllabus.
- 4) 66% of the respondents are highly satisfied with the credit system followed by the college.
- 5) 77% of the respondents are highly satisfied with the hours allotted for a particular subject.
- 6) 73% of the respondents are highly satisfied with the infrastructure available in the college.
- 7) 84% of the respondents are satisfied with the present teaching aids.
- 8) 73% of the respondents are satisfied with the present learning environment.
- 9) 16% of the respondents are wish to participate in framing the syllabus
- 10) 80% of the respondents don't need any flexible hours. They are comfortable with the current working hours.

4.1 SUGGESTIONS:

- 1) The college can increase the transparency level in paper evaluation process.
- 2) The college can permit the participation of students while preparing syllabus.
- 3) The college can prove 24 hours net facility to students.
- 4) They can invite more companies for campus interview

CONCLUSION:

Students preferentially take in and process information in different ways: by seeing and hearing, reflecting and acting, reasoning logically and intuitively, analyzing and visualizing, steadily and in fits and starts. Teaching methods also vary. Some instructors lecture, others demonstrate or lead students to self-discovery; some focus on principles and others on applications; some emphasize memory and others understanding[11-13]. When mismatches exist between learning styles of most students in a class and the teaching style of the professor, the students may become bored and inattentive in class, do poorly on tests, get discouraged about the courses, the curriculum, and themselves, and in some cases change to other curricula or drop out of school. Professors, confronted by low test grades, unresponsive or hostile classes, poor attendance and dropouts, know something is not working. They may become overly critical of their students (making things even worse) or begin to wonder if they are in the right profession. Most seriously, society loses potentially excellent professionals[14]. To overcome these problems, professors should strive for a balance of instructional methods (as opposed to trying to teach each student exclusively according to his or her preferences.) If the balance is achieved, all students will be taught partly in a manner they prefer,

which leads to an increased comfort level and willingness to learn, and partly in a less preferred manner, which provides practice and feedback in ways of thinking and solving problems which they may not initially be comfortable with but which they will have to use to be fully effective professionals.

Student-centered environment can do wonders in our country. In this study most of the students were highly satisfied with the syllabus, autonomous status, infrastructure, teaching aids and all other facilities provided by the management. If the college put their fullest effort in Students Centered Environment, definitely it will prove its own excellence. Enhancement of Education System in India through Learners Centered Environment will contribute great leaders, knowledgeable scientists and sincere educationalists to our country which we are in need of.

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Evolving Technologies in Education – Implementing a Moral Education Curriculum and Accessing it's Impact on Students Behaviour

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INTRODUCTION:

When most persons talk about a college curriculum, they think about subjects and language courses. The problem is that the neglect of teaching moral values in colleges hurting the students and causing problems in society. If a person has never learned any moral values how he or she is able to discern the difference between right and wrong? That is basically the essence of moral education. Moral education refers to help students acquire those virtues or moral habits that will help them individually live good and at the same time become productive, contributing to the members of their communities. In this view moral education would contribute not only to the students as individuals but also to the social cohesion of a community. The word moral comes from a latin word root which means code or customs of the people, the social glue that defines how individuals live together.

For any society to exist it's members must share a number of moral virtues. They must be honest, responsible and respectful of one others well being, we agree about this. Public schools have a vital role to play in nurturing consensus virtues and values, as the character education movement rightly emphasizes, indeed a major purpose of schooling is to help develop good persons.

Depressing reports of students cheating, lacking self discipline and a lack luster approach to school work are common. During last decade this trend of neglecting to teach character has changed with the introduction of moral values education programmes. People are now talking about the importance of character and personal integrity.

In today's society, many homes are headed by working parents who are exhausted when they come home and the children are left with abundant time for exposure to such negative violence. Today, there is renewed consensus concerning core values that transcends cultural, political and religious boundaries. These core values comprise the basis of modern character education. Respect, compassion, responsibility, honesty, integrity and fairness are the building blocks of moral education programmes that are emerging across the nation. This new character education movement is based on the belief that violent, dishonest, irresponsible and destructive behavior of today's youth is the result of the absence of good character.

Everyone recognizes the need for educating youngsters about the importance of moral values, today's complex world. Moral education is a subject introduced at the university level as a strategy to ensure that all students are able to discern right from wrong and make ethical decisions. The question raised is how can we ensure that the knowledge acquired from the subject is internationalized with long lasting benefits to them? One approach is to employ a relevant teaching model. Thus the purpose of this paper is to propose – implementing moral studies a teaching and learning model for moral studies, a strategy which facilitates students learning and acquisition of lifelong values.

METHODOLOGY

DESIGN OF THE STUDY

SAMPLE

The study was conducted in rural college students in Kanyakumari district. The sample comprised of 100 students. Most of them were third year students. This study was divided into planning, implementation and evaluation stages throughout the entire research.

INSTRUMENT

Student's thoughts and opinions were gathered via a questionnaire which was administered to the students towards the end of the semester. The questionnaire consisted of questions that seek to explore the students' expectation at the beginning and at the end of the semester. The questions

present were respect towards others, personal responsibility, conflict resolution, better attendance, patience, kindness, sharing, calm articulation, community contribution, honesty and compassion. In the planning stage which had a number of talks and meetings with the students, staff and how to implement the research into curriculum and college wide activities. The implementation stage consisted of regular meetings, discussing the meaning of core ethical values, character education as a part of classes in language etc. The evaluation depends on both qualitative and quantitative approach.

DATA COLLECTION

The questionnaire was administered to the students in the final weeks of their tutorial classes to ensure that students had a complete experience of the unit and adequate time was given to complete them. The participants were informed of the purpose of the questionnaire and confidentially about the study.

FINDINGS AND DISCUSSIONS

Values learnt. The findings indicated that the students acquire important moral values from the project: teamwork (82%), responsibilities (80%), confidence (80%), respect (82%), and appreciation of life (79%). As a social animal, the community research did encourage better interaction not only between the students and community, but most importantly, among the students themselves. Being in a group, the students depended on one another greatly to complete the research. At the same time, they also learned to respect and be tolerant one another because, in the course of the completion of this research, they encountered times when they were forced to make decisions. the students had to learn to make the best they could as they knew the research was undertaken at a campus event where not only their peers would be watching what they were doing, but the public would also be witness to their behaviour . From the visits to the charity organizations, they also learned to appreciate what they have in life compared to less fortunate people whose existence may not even be recognized by other members of the society.

CONCLUSION

One purpose of moral education is to help make students virtuous honest, responsible and compassion. Another is to make mature students informed and reflective about important and controversial moral issues. Moral education is therefore concerned with directing human energies toward constructive social goals. Morality is not a quality which human beings acquire automatically. It has to be instilled by training and education so that a set of values may be formed. Thus the whole person is prepared for participation in the moral institutions with a proper sense of conscience, polity, law and economy. It implants in each individual such dispositions as shall enable them to live and work harmoniously with others, both in the present school premises and for the future, and on every level of human interaction. Moral science not only helps us in imbibing good moral values, but also enables us to differentiate between good and evil. This is for what use the society would be a doctor, engineer, or for that matter any person bereft of moral values. Such persons no matter how good they are in their profession would be threat to the society. There are numerous examples of intellectual and successful people bringing disgrace to themselves and the nation by their immoral deeds. The latest being the high profile doctors who stole kidneys from poor people for monetary gains. Such people may have been good in academics but, their scant regard for moral values because of lack of moral science, ultimately proved to their nemesis. Education and advancement in any field without good moral values and character bring about chaos and ruin. There are innumerable examples from history that bear testimony to this fact. Germany under Adolf Hitler advanced and progressed considerably. However his misplaced notion of the superiority of the German race and profound hatred for the Jews brought his country to ruins. The world would have been spared the scourge of the Second World War, when millions perished, had Adolf Hitler in his childhood got proper instructions in moral science. Moral Science thus undoubtedly is the basic building block of our character and hence it's important for college students. It not only benefits the individual but also the society at large, making the world a better place to live in.

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Use of Multimedia in Teaching

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Introduction:

With the spread and development of English around the world, English is used as a second language in a country like India and for some people the first language. It enjoys a high prestige in the country. At present the role and status of English in India is higher than ever as evidenced by its position as a key subject of medium of instruction, curriculum. As the number of English learners is increasing different teaching methods have been implemented to test the effectiveness of the teaching process. Use of authentic materials in the form of films, radio, TV has been there for a long time. It is true that these technologies have proved successful in replacing the traditional teaching. The new era assigns new challenges and duties on the modern teacher. The tradition of English teaching has been drastically changed with the remarkable entry of technology. Technology provides so many options as making teaching interesting and also making teaching more productive in terms of improvements.

At present the role and status of English is that it is the language of social context, political, socio cultural, business, education, industries, media, library, communication across borders, and key subject in curriculum and language of imparting education. It is also a crucial determinant for university entrance and processing well-paid jobs in the commercial sector. Since there are more and more English learners in India, different teaching methods have been implemented to test the effectiveness of the teaching process. One method involves multimedia in ELT in order to create English contexts. This helps students to get involved and learn according to their interests. It has been tested effectively and is widely accepted for teaching English in modern world. Technology is utilized for the upliftment of modern styles; it satisfies both visual and auditory senses of the students. With the spread and development of English around the world, English has been learned and used by more and more speakers.

Use of Technology in teaching communication skill:

In Teaching and learning communication skills, we have a lot to choose from the world of technology: TV, CD Rom, Computers, C.A.L.L., the Internet, Electronic Dictionary, Email, Blogs and Audio Cassettes, Power Point, Videos, DVD's or VCD's. The last two decades have witnessed a revolution due to onset of technology, and has changed the dynamics of educational institutes, and has also influenced the educational system and the way people interact and work in the society. This rapid rising and development of information technology has offered a better pattern to explore the new teaching model. Using multimedia to create a context to teach communication skill has its unique advantages. As a result technology plays a very important role in teaching communication skill.

As the use of English has increased in popularity so has the need for qualified teachers to instruct students in the language. It is true that there are teachers who use 'cutting edge' technology, but the majority of teachers still teach in the traditional manner. None of these traditional manners are bad or damaging the students. In fact, till date they are proving to be useful also. However, there are many more opportunities for students to gain confidence practice and extend themselves, especially for ESL students who learn the language for more than just fun. For them to keep pace with ELT and gain more confidence they have to stride into the world of multimedia technology.

The Growth of ELT Through Technology:

English communication skill Teaching has been with us for many years and its significance continues to grow, fuel led, partially by the Internet. For the first time there are more Non-Native than Native users of the language and diversity of context in terms of learners, age, nationality, learning background etcetera has become a defining characteristic of ELT today. With the rapid development of science and technology, the emerging and developing of multimedia technology and its application to teaching, featuring audio, visual, animation effects comes into full play in English class teaching and sets a favorable platform for reform and exploration on English teaching model in the new era. It's proved that multimedia technology plays a positive role in promoting activities and initiatives of student and teaching effect in English communication class.

Technological innovations have gone hand -in hand with the growth of English and are changing the way in which we communicate. It is fair to assert that the growth of the internet has

facilitated the growth of the English communication and that this has occurred at a time when computers are no longer the exclusive domains of the dedicated few, but rather available to many. And as a result if we neglect or ignore technological developments they will continue and perhaps we will never be able to catch up, irrespective of our discipline or branch. Teachers can use Multimedia Technology to give more colorful, stimulating lectures (new Horizons).

To Cultivate Students' Interest in Study:

Nowadays, the stereotyped traditional teaching methods and environment are unpopular while multimedia technology featuring audio, visual animation effects naturally and humanely makes us more access to information besides, with such characteristics as abundant-information.

Multimedia Technology should not be over used:

Some teachers may possess the improper concept that they would totally apply multimedia technology in their teaching. It is also believed that the more utilization of multimedia technology, the better class atmosphere may grow, the more actively the students get involved in class participation, the more easily the material access to the students. Apparently, the students show some interest in leaning, but actually, they feel like looking on. In practice, the more unconscious attention the students pay. It is impossible to effectively train the students' language expression in class time. It is clear that in spite of advantages of application of multimedia technology, it assists in teaching. It is true that one of the ultimate goals of multimedia language teaching is to promote students' motivation and learning interest, which can be a practical way to get them involved in the language learning, Context creation of ELT should be based on the openness and Accessibility of the teaching materials and information. Concerning the development of technology, we believe that in future, the use of multimedia English teaching will be further developed. The process of English communication learning will be more student-centered but less time-consuming.

Conclusion:

Therefore, it promises that the teaching quality will be improved and students' applied English communication can be effectively cultivated, meaning that students' communicative competence will be further developed. In conclusion, we believe that this process can fully improve students' ideation and practical language skills, which is helpful and useful to ensure and fulfill an effective result of teaching and learning. Barring a few problem areas multimedia technology can be used effectively in classrooms of ELT with proper computer knowledge on the part of teachers, overcoming the finance problems in setting up the infrastructure and not allowing the teachers to become technophobes.

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Use of ICT in Education for Excellency

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The new country has brought changes particularly in all spheres of global communication and global economy. This directly made an impact on educational sector leading to structural changes in the form of organizations and delivery of educational services. Introduction of ICT in the educational sector changed altogether the attitude towards education.

Educational system all over the world is under increasing pressure to use information and communication technologies to teach students the knowledge and skills they require in 21st century. In the changing scenario of digital world, a student is no longer a citizen of his own land. He is a world's citizen needs to be taught and trained and developed from larger perspective of globalization. And the teacher is no longer information provider, he is becoming a mentor, facilitator and co-learner. A teacher guides the students the information to be accessed and interacted with, he is becoming less central to the learning process.

Information and Communication Technologies (ICT's) can be used to support classroom based learning as well. ICTs can also be used for blend learning(combination of traditional classroom with e-learning). According to Virtual Colombo Plan, "Emerging applications of ICT's will have profound impact on the evolution of virtual education by enable more access to educational opportunities, enhancing the quality of teaching and reducing costs. ICT's can improve the delivery of education and broaden the range of options available for distance education, noting that the policy and strategy must be tailored to local circumstances, and locally appropriate technologies found to maximise the benefits and minimise the costs".

Application of ICT in the education systems of developing countries will continue to lag behind developments in other parts of the world unless there are interventions that increase the capacity to participate more actively. To meet the needs of education and training market today, more and more educational institutions in developing countries are likely to take advantage of ICTs to offer virtual education.

INTEGRATING ICT IN EDUCATION:

There are many emerging issues that necessitate the integration of ICT in education, such as technological, process, pedagogical, ethical and economical. The technological issues are in connection with the telephone network, power supply, machines, maintenance, technical support, networking etc. The process issues focus on policy, driving force, programme formulation, time frame, resources and models of dissemination. The pedagogical issues emerge out of special needs, gender, language, curriculum, literacy, role of learner, teacher, law maker, policy maker, local community, parents intellectual property, public domain, propaganda, blasphemies and pornography. There are economical issues emerging out of global domination and educational market.

BENEFITS OF ICT IN EDUCATION:

FLEXIBILITY AND ACCESSIBILITY:

ICT learning applications are changing the way we think about and approach learning. The learner can learn, whenever, wherever and however in a way that suits him-at campus, at home or in the work place.

QUALITY SOURCE

Uniform standardised education could be given by ICT. The delivery of presentation of the information may differ from Staff to Staff. In a classroom of average, below average and above average, the level of understanding varies. Here ICT is of greater help because the same learning material will be available to all students. So all the students; urban and rural can make use of the same course material.

QUALITY TEACHERS

Whether it is web based learning or e-learning, the content is from best resource persons. Students taught by inexperienced and incompetent will pose a problem. Since the student teacher ratio (25:1) has not been maintained in many colleges, quality of teaching does not happen. But in ICT , every student gets a chance to be taught by best teachers.

ENHANCED LEARNING

ICT provides cognitively, active and contact based(real world),learning activities and is of highly interactive nature of well-designed one. Many learners also find it easier to ask questions via e-mail because they have the privacy of direct contact with the instructor to avoid the classroom fear of exposing ignorance. It provide dynamic and collaborated environment. It helps in getting immediate feedback from every student. Student generally hesitate to interact or express their opinion on a particular topic in a conventional classroom, whereas in online classes they are not hesitant and they even express the non-verbal cues like ☺ which indicates that the student is happy about the particular topic.

In ICT learning students are given more freedom that they agree and disagree, persuade, interact in a group, try to get their point across and improve their writing skills too.

REMOVES BIAS

ICT method removes the bias of sex, religion, colour, caste, and nation etc. in the online education there is no room for all these differences and there is no room for partiality. A student needn't be conscious about the cultural differences and can enjoy the freedom of learning.

LEARN AT OWN PACE

Online learning is suitable for all kinds of learners. Students cannot refer to the course content or the delivered lecture if they do not understand or listen carefully. Here in online learning students can refer to the course content again and again and learn at their own pace. ICT is beneficial for students of poor mental calibre and slow learners.

In distance learning also it is of great help as learners are of different age groups. Student who cannot physically get into a classroom and who don't enjoy the class experience are comfortable with ICT.

INDIVIDUALISED LEARNING

Online learning provides individualized learning experience for all types of learners: disadvantaged, exceptionally gifted, students who are remote.

INCREASES ABSORPTION LEVEL

With the high quality of study material available at any time students are better prepared in the class. Their absorption level goes up. Studies have proved that absorption level is 20% higher than the conventional learning.

EASY EVALUATION

Online drill or tests can be used to reinforce material. Multiple choice formats could be used to measure up student's level of understanding through continuous assesments a student can improve his performance. Online testing reduces examination stress and fear. Online evaluation is not time consuming and also there is no place for partiality.

FACTORS RESPONSIBLE FOR THE GROWTH OF ICT TECHNOLOGICAL FACTORS:

There are various technological considerations which influence the growth and adoption of communication technology. There are number of studies that find technology itself as a barrier in growth

Appropriateness: The technology should suit the geographical conditions of the country.

Accessibility: Certain constraints such as lack of sufficient money, lack of interest among educators and administrators, lack of sufficient software/courseware, lack of political will etc. will invariably affect the accessibility of a technology to the education sectors.

EDUCATIONAL FACTORS:

There are certain educational factors that influence growth and adoption of the communication technology. Teachers play a crucial role in adoption of communication technology or an innovation. There are some additional factors that influence decision makers to ignore or adopt technologies for educational purposes:

- The teachers are usually not involved in planning and preparing the courseware.

- It is very difficult to cover the entire syllabus by one technology. Therefore, other media are required to achieve the educational objectives in their totality; but it is very difficult for many countries to adopt the multimedia approach to the teaching-learning.
- The students dependency on the books and teacher's lecture discourage them to make use of the modern communication technology.
- Educators prefer the technology which has the potential of solving educational problems, and consequently can improve the quality of instruction.

HUMAN AND ADMINISTRATIVE FACTORS:

If the student do not have access to technology being implemented, the situation may cause serious problems. The situation will immediately create two class of students: the 'haves' and the 'have-nots', which in turn will cause various human problems.

ECONOMIC FACTORS:

The application of any communication technology is a costly affair. The investment runs to several lakhs of rupees. Such a huge investment requirement forces many of them not to use the technology.

CONCLUSION

The values of objectivity, honesty, integrity, selflessness, accountability and openness should be close to the hearts of all the stake-holders of higher education system. We the teachers have an important role to play in shaping the destiny of our students and enabling them to compete globally.

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Emotional Intelligence of Teachers in Tirunelveli District

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Introduction

In the globalized and competitive era, success of teaching is mainly depends upon the efficiency of the teachers. In the latest trend not only Intelligent Quotient, Emotional intelligence is also need to be a successful manager. Even though the teachers are having lot of qualities, without Emotional Intelligence, they can't be a successful. Emotional intelligence dominates the other qualities.

Emotional intelligence also called as EI and often measured as Emotional intelligence Quotient or EQ describes an ability, capacity, or skill to perceive, assess and manage the emotions of one's self, of others and of groups. The "term emotional intelligence" appears to have originated with Wayne Payne in the year 1985, but was

popularized by Daniel Goleman (1995), who has published several books and articles about emotional intelligence and its application to business. However, being a relatively new area, the definition of emotional intelligence is constantly changing. Some psychologists, such as John D. Mayer (2005a), prefer to distinguish emotional knowledge from emotional intelligence.

The need to identify emotional intelligence competencies in perspective candidates for employment in teaching work should be a consideration during the hiring process.

Objectives

The study is primarily aimed at identifying the level of emotional intelligence among the teachers in Tirunelveli district. The specific objectives of the study are:

1. To evaluate the emotional intelligence among the teachers in Tirunelveli district.
2. To examine the possible differences in the level of Emotional Intelligence among the teachers of different position.

Methodology/Questionnaire

After selecting the problem for investigation, the researcher finalized the variables and developed a tool for the investigation to study the interpersonal, intrapersonal, stress management, adaptability and general mood of the teachers in Tirunelveli district. The tool compressed 5 divisions and sixteen sub divisions. The tool was a five point Likert's scale with positive statements with textual response format ranging from "not true of me" (1) to "true of me" (5). The validity of the questionnaire was tested by a pilot study. Expert's opinion was also drawn to develop the questionnaire. Data were obtained directly from college teachers by using a well framed questionnaire. The sample size was 312. Area selected for the study is Tirunelveli district. The collected data were analyzed with the help of mean, standard deviation, 't' test and Chi-square test.

Designation- wise Classification of the Sample Respondents.

A question of different level of emotional quotient based on position in teaching arises though they are equally treated in the society. For this purpose, professors and assistant professors in designation - wise classification of the teachers under the study is presented in table 1.

TABLE 1
Designation-wise Classification of the Sample Respondents

S.No	Teaching Position	No. of respondents	Percentage
1	Assistant professors	227	72.76
2	professors	85	27.24
Total		312	100.00

Source: Primary Data

From Table 1, it is found that out of 312 teachers, 227 (72.76%) are assistant professors and 85 teachers (27.24%) are professors..

TABLE 2
Differences in Emotional Intelligence scores between Teachers

S.No	Emotional Quotient	Assistant Professor		Professor		't' Value	Results at 0.05 level
		Mean	S.D	Mean	S.D.		
1	Self-Regard	31.9736	2.5446	30.2353	4.0224	3.7155	Sig.
2	Self-Awareness	30.7489	3.8853	29.8235	3.7138	1.9347	N.S.
3	Assertiveness	25.0749	3.8126	25.1176	3.5127	0.0935	N.S.
4	Independence	24.4097	3.4812	22.9412	4.7955	2.5802	Sig.
5	Self- Actualisation	26.8811	3.0108	25.8235	3.3473	2.5518	Sig.
	Intra-Personal	139.0881	11.9449	133.9412	16.4405	2.6374	Sig.
6	Empathy	22.8458	2.1380	22.5882	2.2244	0.9202	N.S.
7	Social Responsibility	31.2687	2.8599	29.8235	3.9442	3.0878	Sig.
8	Interpersonal Relationship	26.8855	3.4787	25.5882	4.7037	2.3165	Sig.
	Inter Personal	81.0000	6.3814	78.0000	9.4059	2.7158	Sig.
9	Stress Tolerance	25.6476	3.6340	24.2941	3.5107	3.0027	Sig.
10	Impulse Control	21.2599	3.5244	19.8000	4.9771	2.4814	Sig.
	Stress Management	46.9075	6.6110	44.0941	7.5063	3.0419	Sig.
11	Reality Testing	25.7401	3.7202	25.5294	3.4830	0.4668	N.S.
12	Flexibility	21.5330	3.2411	21.0588	3.0577	1.1996	N.S.

13	Problem Solving	31.0573	3.8986	30.1176	4.5359	1.6903	N.S.
	Adaptability	78.3304	9.2817	76.7059	9.9337	1.3089	N.S.
14	Optimism	22.2115	3.2106	21.9412	3.4380	0.6293	N.S.
15	Happiness	22.1322	3.2947	22.2941	2.2691	0.4919	N.S.
16	Vigour	25.8811	3.5766	25.8824	3.7555	0.0027	N.S.
	General Mood	70.2247	8.4914	70.1176	8.6629	0.0977	N.S.
	Emotional Quotient	415.5507	36.9736	402.8588	46.4812	2.2635	Sig.

Source: Primary Data

The calculated 't' values of the emotional quotient factors namely, self-regard, independence, self-actualization, Intrapersonal, social responsibility, interpersonal relationship, interpersonal, stress tolerance, impulse control, stress management, and Emotional quotient (overall) are greater than the table value. It indicates that there exist significant differences among the means scores of emotional quotient factors such as self-regard, independence, self-actualization, Intrapersonal, social responsibility, interpersonal relationship, interpersonal, stress tolerance, impulse control, stress management, and Emotional quotient (overall) of teachers with respect to teaching position. Hence the null hypothesis, "self-regard, independence, self-actualization, Intrapersonal, social responsibility, interpersonal relationship, interpersonal, stress tolerance, impulse control, stress management, and Emotional quotient (overall) of teachers with respect to teaching position" is rejected.

Designation and Level of Emotional Quotient

Table 3 shows the teaching position of teachers and their levels of emotional quotient.

TABLE 3
Designation and Level of Emotional Quotient of Teachers

Designation	Level of Emotional Quotient							
	Low Level		Medium Level		High Level		Total	
	No.	%	No.	%	No.	%	No.	%
Assistant professors	36	59.02	155	79.49	36	64.29	227	72.76
Professors	25	40.98	40	20.51	20	35.71	85	27.24
Total	61	100.00	195	100.00	56	100.00	312	100.00

Source: Primary Data

Table 3 reveals that out of 61 teachers having low level emotional quotient, 36 (59.02%) are Assistant professors and 25 (40.98%) are professors; out of 195 teachers having medium level emotional quotient, 155 (79.49%) are in Assistant professors, 40 (20.51%) are Professors and out of 56 teachers having high level emotional quotient, 36 (64.29%) are Assistant professors I, 20 (35.71%) are Professors.

Out of 227 (72.76%) Assistant professors, 36 (15.86%) are having low level emotional quotient, 155 (68.28%) are having medium level of EQ and 36 (15.86%) are having high level of EQ.

Out of 85 (27.24%) professors, 25 (29.41%) are having low level emotional quotient, 40 (47.06%) are having medium level of EQ and 20 (23.53%) are having high level of EQ.

TABLE 4

Designation and Level of Emotional Quotient – Chi-Square Test

HO: The level of emotional quotient of teachers is independent of teaching position

Tools used: Chi-Square test.

Particular	df	Chi-Square Value		Result at 0.05 Level
		Calculated	Table	
Level of Emotional Quotient and teaching position	2	8.61	5.99	Significant

Table 4 shows that the calculated value of Chi-square is greater than the table value at 5% level of significance. Hence the null hypothesis, “The level of emotional quotient of teachers is independent in designation” is rejected. Hence, it would be concluded that the level of emotional quotient of teachers is dependent of teaching position.

Findings and Discussion

Most of the sample respondents are assistant professors. It is clear that there exist significant differences among the means scores of emotional quotient factors such self-regard, Self-Awareness, independence, self-actualization, Intrapersonal, social responsibility, stress tolerance, impulse control, stress management, flexibility, vigour and Emotional quotient (over all) of teachers with respect to teaching position. Most of the respondents in assistant professors and professors are having medium level of Emotional Quotient. It would be found that the level of emotional quotient of teachers is dependent of teaching position.

The application of EI has got more advantages towards organizational effectiveness in the areas of leadership, organizational learning, career development and organizational performance. By being able to develop both the logical and emotional side of the self, one can achieve a substantial break in the whole range of teaching career.

Cooper and Sawaf (1998) appraise the application of EI in improving organizational performance towards more positive side through the factors such as effective leadership, effective decision making, open and honest communication, trusting relationship and teamwork, student loyalty and creation and innovation.

Outcomes contain broader scales of general health, quality of life, relationship quotient and optimal performance. He further encourages organization to increase trust, to increase the capability of the team to work under pressure and to create the future through engendering initiative in students.

To conclude that Emotional intelligence is highly correlated with performance, and since most of the teachers are at medium level of EI, they may need to focus on development of Emotional Intelligence.

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Modern Teaching Aids

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Introduction

Modern education has been flaunted all round the world, which is useful and easy for teachers but not for students. Day by day technology is growing, but the problems which is created by them is just rapid and many are suffering from it. The world is behind new and modern technology which makes their work easy. While the world is growing rapidly more in technologically advanced, thus increasing the need for balanced, bright, educated and healthy individuals but our school systems are falling further and further behind in meeting the needs.

Due to this, the schools find it easier to educate the children, but they don't care on the health of those small kids. Even not only schools, we need to talk about parents also who just introduce computer and gadgets to kids at a small age. With the current addiction on using technology in education many parents and schools are introducing computers to children at young ages. This is on way of making their life easier and makes them to know lots of things, new things just on surfing rather than reading books and understanding. They just give them a head start on developing academic skills and well also to prepare them self for the workplace of a better future to competitiveness. But recently educators, doctors, scientist, psychologists and various organizations like WHO have raised their concerns about children's using computer at an early age.

On talking of physical development, we know that there are many health issues in using computer and other electronic gadgets at early age. The most important and the compelling arguments which was found and made against the use of computers were the risk of repetitive motion injury which is scientifically known as Carpal Tunnel Syndrome. This problem mainly comes for children than adult. It has a greater risk for students who are just using computer from an early age. This is because children's skeletal and muscular systems are not fully formed as it will be in the growing stage and also prone to greater risk for injury at a very early age.

Parents just choose the school for their children based on the infrastructure and luxury the children needs as they are same like in their home. They just prefer schools which advertise in bold letters providing the facilities heading that they are providing Air - Conditioned classrooms and use modern technology to teach students. So on seeing these ads parents opt for such schools international schools for their children without even thinking about the harmful effects which takes place on their child's growth. Scientist and Researchers have found some health issues which happen due to change of nature condition, which is they indicate that air-conditioning undermines and changes our natural adaptation to heat which hinders and affects the endocrine system. They also found that Air-conditioning leads to obesity.

Because usually humans burn calories more slowly in a cool environment that is Air-Conditioned and also tend them to eat more. On practicing in schools, even at homes children's are preferring the same, were they just turn up the air-conditioning and do their work on computers and watch television. Due to these Children do not want to go outside for playing games, as a result they get less exercise and this leads to obesity. Also due to continuous usage of computer an another possible risk is eye-strain and eye-rashes which may include dryness due to not blinking enough, often getting headaches and blurry vision.

The concern over here is on using computer at an early age. Due to this consequence of intensive usage of computer early age use on children's mental and intellectual development. The time spent on a computer is at very risk which not only affects the life of the people but also the amount of time available for interaction with humans and it also decreases the amount of time a child spends in

creative play. The creativity and finding his own knowledge will limit the development of a child's imaginative skill and creative abilities. Educators emphasize that direct interaction with others has the greatest impact on a child's language and literary development. Interaction is more important in the part of education.

In modern education we don't find it. Students are engaged and made to be active when they are interacting with teacher and with other students. But in LCD projectors, we don't find any interaction with students. These LCD projectors which are now widely used in schools for educating children fall flat in all means. They are just a stable device which just spoils the children's life. Student's engagement and activeness is lot more important than attending schools. A simple machine called LCD projector do not engage students, only a Teacher can engage students with their teaching. May be it is not teacher's job to make the students attract and watch while they teach. But this an LCD can't do. It is teacher's job for what they are being as a teacher and their duty to watch while students work. Any way students do not learn or develop their knowledge by watching the teacher but they learn a lot while doing or interacting with them.

Modern teaching gives us new and innovative methods which can be a welcome asset but at the same time they do not cater the needs for the overall development of a student. Their original purpose is to supplement and enhance the true methods of education but they fail to do it. They just spoil the students both mentally and physically. Instead these new modern methods are replacing those old traditional ways that were working beautifully and made students overall development for his and left it their place a vast wasteland now.

We all know technology plays an important role in enhancing and developing our learning system. Through internet it has been made possible to know all things. We can attend classes from sitting in home through Video Conferencing or live chat and clear all our doubts. The time of blackboards with chalk and notice boards are changed. The most extreme factor in a teaching methods and its process is the quantity and quality of the lessons given by the teachers are changed and not so understandable for students. Teachers are therefore should use modern teaching aids. Scientific proof has been made that learning from books and black board is comparatively less when the students understand a lot on pictures and videos. We all know a picture is equal to 1000 words and a video is equal to 1000 pictures. So our modern education follows these techniques to educate children well and make them understand well. Modern teaching aids are used to make learning sessions interactive and motivating. All these modern aids help the students to learn well and understand.

Nowadays, as classes are modified and equipped with Modern teaching aids such as speakers, online streaming videos, Interactive Whiteboards, Visualizer, response system, CD's, projectors and educational software etc. The teaching done with all these technology makes the students to have interest in learning than the same old black board and teachers. Teaching done Modern teaching aids is important and most preferred in the technological age. Many subject topics can be taught better and made the students to understand well than reading from books. We can teach students in more depth and cleared all doubts with Modern teaching aids.

Teachers must use various types of Modern teaching aids to connect with students. Now days, we can find class rooms without teachers and just students sitting in class room and a teacher is teaching through online video streaming from some other place. These things are done by the satellite and communication to students is made possible to clear doubts and make them understand. Modern teaching aids incorporate audio-visual techniques like speakers, screens that influence and create the interest and memory of students. Utilizing Modern teaching aids successfully will create good educated students as it states to the best platform for learning and teaching.

Teachers are using multimedia content which makes students to see more interestingly they watch films with audio and video into their lessons. The teacher has to be sure to identify the main points of the contents so that children can absorb the knowledge. A multimedia and flash content gives the student a better learning and new experience as they can watch the actual phenomena and understand the processes and subjects well.

With Interactive Whiteboards, Teachers can teach and save on their content with the important points which they want to teach and save it in computer files that can't be done through traditional boards. Due to this, time factor is reduced and also teacher is not needed to write each time on boards the same lessons. Time has come to integrate with the use modern teaching aids into the classroom for effective learning, understanding and teaching for students. Students, who come to schools for education especially small children almost find them very difficult to loathe about their daily assignments and homework which are filed to them.

These young minds find it more strain and stress and makes the to get envy on their own teachers as they come in the classroom, teach and leave where they do not have any homework, tests and assessments for them. They just tell all those things to student's and leave. But that may not be true in the coming era of modern teaching aids where teachers themselves have to prepare and do a lot homework's before coming to the classroom. The textbook, writing and dictation have become a practice of the past.

Modern teaching aids like LCD projectors, Power Point Presentations, Audio and Video presentations demand more preparations and homework from the teacher. Many schools have recently added such aids and techniques in the curriculum to provide to the students an all-inclusive learning package and environment.

Conclusion

On teaching certain subjects like History, Social and Sciences, teachers find some difficulties to teach them as they cannot completely fully described on the blackboard or by oral recitation. Even take an example of the development stages of living cells, Human body, functioning or various organs, organ systems, etc. Even though the teacher may carry a chart or draw a neat diagram on the board, but effective learning still misses out. A video presentation or short film based on it will give students a better understanding. This gives the student a better learning experience as they can watch the actual phenomena and processes. The teacher has to be sure to identify the main points or emphasize on these points so that children can assimilate the knowledge. So it is better we follow modern teaching aids in our education but we should not be addicted to it. So we have limits in following each technology and should use it accordingly to our use.

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Use of Multimedia in Classrooms

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INTRODUCTION

The population of student learning English as a foreign language has been steadily increasing from year to year. To succeed in college, these students must develop not only linguistics, but also academic skills. These skills involve using English to acquire and articulate knowledge by reading academic texts, writing acceptable academic prose, conducting and reporting research. In Indonesia, English is taught in schools since the students go to Junior high schools. However, many of them do not know how to speak and write English for some reasons. Some people from educational field said that the curriculum need to be changed, including the purpose of teaching them English, the textbook, and the methods. To meet the students' academic needs and help them develop strong English language skills, there are a number of ways need to be applied. One of the techniques to improving the students is using multimedia in the process of teaching and learning in the classrooms. Multimedia use in classroom will provide opportunity for interacting with diverse texts that give students a solid background in the tasks and content of mainstream college courses. Furthermore, because educational technology is expected to become an integral part of the curriculum, EFL students must become proficient in accessing and using electronic resources. This article describes the method that could help the students to develop their skills in English through multimedia: print text, film, video, radio, computer, and Internet. As students, they must be dealt with the subject found in resource material; also they are able to choose the resources that best suitable the points they wish to make. However, the courses are not included research skills, making research reports to challenging their English language skills.

Multimedia Classroom

The time it takes to earn the degree in education today is based on an increasingly outdated model: so many hours in a classroom entitle a student to a receipt in the form of a grade, and so many receipts can be redeemed for a credential in the form of a degree... Education today is just beginning to think of shifting the basis of certification from time served to skills and knowledge obtained.

Traditionally classroom situation is teachers stand in front of the students, giving explanations, informing, and instructing. They usually use chalk to write something on the blackboard. These technique needs slightly to be modified regarding with the development of the technology. The using of multimedia in classroom cannot be denied anymore. That will make possible for teachers giving more opportunity to students being happier and more enjoy during the course. Traditional classrooms have different settings from the multimedia classrooms. Students seat in rows and a chalkboard in the front. The teacher is standing in front of the class giving a lecture. Compared with traditional classrooms, multimedia classrooms setting differ greatly from traditional classrooms. Traditional classrooms have the seats in rows and a chalkboard in the front. In the multimedia classrooms, students' seat can be modified according to the situation needed. Inside the classrooms, all the equipment is available and makes the students feel comfortable to study. They sit at wide tables in comfortable chairs and have plenty of room to spread work. Furthermore, they also have the opportunity to move the furniture around for group discussions. A large teaching station is located at the front and to one side of the room. Inside the station cabinet there are controls for the rooms built – in equipment. The use of multimedia described here makes use of print texts, film and Internet to develop and enhance linguistics and knowledge. Through their interactions with multimedia texts on topic of interest, students become increasingly familiar with academic vocabulary and language structures. As they pursue sustained study of one content area through focus discipline research, the students become actively engaged in the process of meaning construction within and across different

media. Working through the complex intermingling of meanings, embedded within different texts encourages students to make connections as they build a wider range of schemata, which are then available to help them grasp future texts. Using print, film and Internet as resources for studying provides students with opportunities to gather information through stimuli that will stimulate their imaginations, engage their interest and introduce them to the raw materials for analysis and interpretation of both language and context. Students develop solid foundation in several subject areas and become “content experts” in one. Thus they greatly increase their overall knowledge base, as well as their English language and critical literacy skills, facilitating their performance in future college courses. Although various studies support the application of multimedia in the classroom, Liu, Jones and Hemstreet (1998) point out that the design of multimedia is useful when technology is to have any effect on learning. One of the main purposes of software in writing is to facilitate the development of academic writing skills for students through the use of the objects matter for writing assignments. The program is presented as a simulation game to interest and motivation. Students using the program found themselves in the virtual world of education.

Following is a list of 10 reasons you should use multimedia in your classroom. As you investigate and try these and other tools, you will notice that they are social, encouraging sharing, feedback, publication, and other experiences that support learning. By modeling social learning and learning with technology, you will be preparing your students for success in today’s rapidly changing world.

Facilitate and develop a community of learners through online ice-breaker activities. These activities offer fun and easy ways to get to know each other while also providing outlets for student creativity. A neat tool that works well for this is VoiceThread. Students can use a computer webcam to record a video of themselves and view other students’ videos, all on one page.

Help students visualize difficult concepts or procedures more easily by using static or dynamic multimedia.

I have used a very simple and efficient software called ScreenSteps, which allows you to quickly create visual handouts for learners. Teachers and students can use Jing software to record a screenshot or video, which produces a video tutorial or information about a website, embedding the video on their website or sending it to the student as an email attachment. These types of software provide a great way for teachers to make the most out of their multimedia and online resources.

Scaffold learning through activities enhanced by videos and online games.

When assigning reading about an obscure historical event, you might want to create pre-reading activities by having students watch and comment on videos that fill in needed background knowledge. Searching for videos about events can provide needed support and add to a student’s gap in knowledge. Then you could embed these videos on your class website, blog, or wiki. Or, have students add to a playlist as they locate more videos on the topic.

Make language and culture come alive through the viewing and creation of audio and video instruction.

Students could view videos and television programs available online and stay up-to-date on current events in that country. They could also create their own videos and share them with another class, comparing cultural norms and addressing other questions through a group blog or wiki.

Provide a “menu” of authentic assignment options for students to complete, allowing them to explore and identify their passions and talents.

Encourage them to create and publish an original digital story. Have them produce a weekly podcast show for the classroom, highlighting events of the week, using blogs. They might also want to film their developing skills in a sport or record their progress in learning a musical instrument.

Enhance accessibility through the use of powerful multimedia software tools.

Encourage students to use a speech-to-text tool to write their next essay or short story. This is

especially helpful for students who have fine motor challenges or students who have trouble with keyboarding. Use auto-captioning features to create accessible multimedia for students with hearing challenges.

Enable visualization of concepts and their connections through collaborative construction and discussion of concept maps.

One of my all-time favourites is CMap tools, a free, multi-platform software tool that can be downloaded to your computer. Students could work in groups, constructing a concept map and even recording within CMap tools this construction.

Encourage collaboration and feedback by integrating assignments with tools that support conversations and comments.

For instance, have students post their slideshows and have them view their classmates' presentations, and post comments. Or, have students create video comments on video sharing sites, such as TeacherTube. Use collaborative software, such as blogs and wikis, for students to easily create, edit, and publish their work. And, make sure you provide information for parents to access these social media sites to see what their children are doing.

Make learning situated and personal with easy to access information from you and the rest of the world.

Have students subscribe to your class Twitter and blog feeds and enable them on their mobile devices, if possible. Or, have them use a Twitter aggregator, such as Tweetdeck, to stay on top of news announcements. Show them how to subscribe to dynamic sites using RSS Readers and how to read and track updated content. Have them subscribe to podcasts and rate those podcasts. Allow students to contact you using SMS.

Help students document and present their learning through authentic assessments.

Instead of taking an end of term test, have students collect their work and detail their progress on their Learning Log, using any number of free blogging tools. Show them how to tag their posts, how to create categories (which could be the course objectives or standards), how to link to artifacts, how to write reflections, and then set aside time at the end of each week for reflection and documentation of their work. At the end of the term or semester, students could then refine their Learning Log, turning it into a showcase Portfolio, presenting it to the class and parents, discussing their work, what they learned, and where they want to go from there. Not only would this individualize their learning experience, but it would make students more responsible for their work and enable them to experience learning as being lifelong and active.

As you can see from these ideas, you can easily align instructional goals and empower instruction through using appropriate multimedia tools. It takes some planning, time, and expenditures, but in the long run, your students will reap many benefits, such as taking more responsibility for their learning, becoming aware of their learning and how to document it, and realizing their own creative potential.

The Film

Film can be used to provide a visual material. The students can read a print text and watch the film later, according to Kasper and Singer (1997), the film can clarify comprehension, consolidate concepts and reinforce learning. It is expected to the students to fully understand both visual and verbal comprehension. By watching the complete film the students expected to understand various areas of academic discourse such as psychology, environmental science and others to broaden the verbal and written perspective (Kasper and Singer, 1997). A study case from Florida International University (1994), has examined a multimedia classroom, the students watching the video novels Tom Jones (the new six part A & E version) and The Scarlet Pimpernel (Anthony Andrews and Jane Seymour). After viewing it, the class asked questions about the movie and assigned essay topics, to help them the teacher asked the students to brainstorm.

CONCLUSION

Through the interaction with multimedia, the students become increasingly familiar with academic vocabulary and language structure. Connecting with the Internet will make the benefit of increased student motivation. Students are eager to begin class and often arrive early at the computer lab, logging on the Internet and beginning research on their own. They also often stay after class to continue working on the Internet. Overall, students develop greater confidence in their ability to use English because they need to interact with the Internet through reading and writing. Using multimedia provides the students to gather information through media that encourages their imaginations, interests. Also it using this technology combined with the sense of teaching will create a successful teaching method.

In our imaginations, we enjoy and value all the benefits of *education on-demand*. We wish the future was here already because deep down inside, we all are lifelong learners. We just want learning to be easy, personalized. This vision is inviting, yet we must live and work in present time. And today, the reality stays apart from the dream. The challenge to educators is clear. We must also establish rigorous standards of quality in the products, services, and solutions we offer to our youth. We must learn how to prepare all of our students for lives that are becoming more and more complex. We must prepare our students to master change.

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New Horizons in E-Learning and Career opportunities

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1. Introduction

Elliot Masie, the gentleman who coined the term ‘E-Learning’ once said “we need to bring learning to people instead of people to learning”. With more and more individuals becoming a part of the World Wide Web and speed of communication steadily rising, e-learning is affording individuals from a wide variety of backgrounds, an opportunity to develop new skills and earn degrees. E-Learning is already huge and is looking to completely revolutionize the educational sector. Future without classroom learning is certainly imaginable, thanks to the advent of the various e-learning technologies present today. It has already changed the way we approach knowledge and skill acquisition. Due to number of devices available and the continuous expansion of internet and mobile networks across the world and technological innovations leads to new scenarios in e-learning and hence require new skill developers. This paper outlines two things namely technological innovations in e-learning and new career opportunities.

2. Technological Innovations in E-Learning

Based on what we know now and by closely following various e-learning technologies that are evolving, the following developments are very likely to occur everywhere in near future.

2.1 Gamification

One of the major challenges involving learning is making sure the people are engaged. Gamification – using game play mechanics in non game situations is fast emerging as an effective technique to engage learners. This adds the interactivity, engagement and immersion that lead to good learning. It includes video games, role play games, visual storytelling, simulations, puzzles, feedback and visual cues. It is measurable and has an objective for the learner. It reinforces previous learned behavior. It allows the learner to explore information in a way that doesn’t feel like a test. [1]

An effective gamification concept is one that: Captures (and retains) learners’ attention, Challenges them, Engages and entertains them, Teaches them. It has proven to be immense in improving employee performance, customer engagement and even personal development. [2] Another emerging application is gamification based e-learning strategies for computer programming education. [3].

2.2 Cloud-based Learning

One time downloads and installation of course material will stop being the norm, and complete shift to cloud-based learning is inevitable. In cloud-based learning, resources are stored in a virtual environment, accessed from various forms of web-enabled devices. It has the scope to offer convenient, inexpensive and personalized content. Apart from this, it also facilitates collaboration allowing companies to pool their resources, share learning strategies and grow central knowledge bases. Although this already exists, now, the greater advancements will make collaboration seamless and more efficient. Students or workers will be able to access individual/complete e-learning modules that can be purchased and downloaded on demand. [4, 5]

One example of cloud-based Learning Management Systems (LMS) for corporate training is “Litmos”. This cloud-based LMS offers employees, customer and channel partners the opportunity to improve their skills and stay up-dated on company policies, compliance and other training needs on virtually any smart phone or tablet.

2.3 M-Learning

Mobile devices are becoming ubiquitous and have become an integral part of the people. Thus mobile learning will be able to deliver content to people on a platform that they are comfortable with. This is suited to short bursts of information, thus delivering information to people when they most need it. This does not simply end at being e-learning on a mobile device. The nature of the content demands that different platforms demands for specific skill sets in terms of development and design [6]. The concept of M-Learning along with the Bring Your Own Device (BYOD) will change the way the next generation approaches learning.

2.4 BYOD

It's a learning professional's dream. People learning everywhere, at any time, and however they want to learn. People feel easy about learning on their own terms and on their own devices. That's the promise of BYOD policies, where companies allow staff to use their personal devices at work. BYOD support is on the rise. In 2013, Cisco's BYOD Insights report revealed that 9 in 10 Americans already use their smart phones for work purposes. A recent TechRepublic study found that most of companies planned to support BYOD officially. As a result, the number of platforms and devices that companies have to support is growing at an unprecedented rate. [7]

The classroom of the future will need to support the use of multiple devices supporting multiple platforms and teachers will need to be more than just that – they'll need to be facilitators.

2.5 MOOC

A Massive Open Online Course (MOOC) is a model for delivering learning content online to any person who wants to take a course. This is the hottest trend right now. This is aimed at unlimited participation and open access via the [web](#). In addition to traditional course materials such as filmed lectures, readings, and [problem sets](#), many MOOCs provide interactive user forums to support community interactions among students, professors, and [teaching assistants](#). [8]

World famous universities like Harvard, MIT, Berkeley, Caltech etc. have jumped onto the MOOC bandwagon. Currently majority of the MOOC's are free and give us a statement of Accomplishment upon completion of the course. They are usually looked at as supplements to increase the knowledge in any field.

3. Career opportunities in E-Learning

Clearly the future of e-learning is extremely bright, and we are on the cusp of a massive shift technologically and commercially. Developing an effective e-learning course would require a team consisting of the following members.

E-Learning Instructor: Candidate with the mastery of the course content who is also an effective communicator so as to be able to teach the course content accurately and clearly.

Subject Matter Expert: someone who's a content expert.

Technical Writer/Editor: Responsible for the content of the course material by effectively gathering information from various authenticated sources and also publishing material online. Technical writer also need to learn to develop web pages as well.

Graphic Designer/ Multimedia Developer: Responsible for the user interface of the course, responsible for creating and editing videos, flash movies etc.

Instructional Designer (ID): There are more jobs for instructional designers than for any other category in e-learning. IDs are the people who combine an understanding of the science of learning with the ability to put the available media, methods, tools to work in the most effective, efficient manner possible. [9]

4. Conclusion

The future of e-learning is extremely promising. But for the learner's point of view, two points to be consider. One is, the effectiveness of the e-learning is only as good as the person engaging in it. If a person is not really interested, the numbers of courses they sign up for will be of any value add to him. Self motivation is must in this domain. Another point is, a college student has his academic path more or less set for the particular duration. However, when it comes to self-learning via online courses, student might find unsure of the path to take, what course to take, etc. So there is a need for the services to support to set right educational path of students.

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Role of Teachers' in the Development of Curriculum for Higher Education

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Introduction:

Education provides a platform to the students to acquire the required knowledge skill and develop positive attitude values and beliefs, higher education provide the best mean of overall development of students. The quality of the knowledge of student depends on the curriculum offered to them during the college education teacher is the best mediator between the curriculum and the students. The curriculum development is a dynamic process and the teacher only knows the various needs of the student, educational institutions, employees and parents. In this context, this paper focuses on the role of the teachers in curriculum development for Higher Education.

Curriculum:

- ✓ Curriculum plays an important role in the field of education. Curriculum is the planned interaction of pupils with instructional content, materials, resources, and processes for evaluating the attainment of educational objectives.
- ✓ The word curriculum is derived from the Latin word 'currere' which means 'run' and it signifies a 'run-away' or a course which one runs to reach a goal.
- ✓ According to Taylor (1966) curriculum means all the learning which is planned or guided by the school whether it is carried in groups or individually, inside or outside the school.
- ✓ Kerr (1968) says, "curriculum means all the learning which is planned or guided by the school, whether it is carried on in groups or individually, inside or outside the school".

Importance of Curriculum in Higher Education:

- A curriculum guides the instructional lessons that teachers use. A curriculum defines what the learner will learn and can possibly guide when the learner learns the information from the lesson.
- A curriculum offers teachers the ideas and strategies for assessing students progress. A student must meet certain academic requirements in order to go to the next level. Without the guidance of a curriculum, teachers cannot be certain that they have supplied the necessary knowledge or the opportunity for student success at the next level, whether that the levels involve a high school, college or career.
- Curriculum can help students to achieve some personal control over their learning, to plan their semester, and manage their time effectively, and describes Active Learning.

Curriculum Development:

Curriculum development is the process of instituting and putting in place precise guidelines of instruction for the curriculum. It describes ways in which teaching and different training organizations plan and guide learning which can be in groups or as an individual. The success of teaching in the classroom depends on the effective developments of the curriculum.

Curriculum development process.

Curriculum development is a dynamic process, it changes according to the need of the society and the stakeholders of the education system. The curriculum development process includes

several stages such as planning, preparing, designing, developing, implementation and evaluation steps are involved of subject.

It is a plan for a sustained process of teaching and learning in a formal institutional setting. Curriculum development is systematic and dynamic process sensitive to time and place in which preparation, development, implementation and evaluation steps are involved.

Challenges in curriculum development

- ❖ There are varieties of challenges facing curriculum development, but in general they are classified into three types, global challenges (external), Education system (Internal), challenges specific to Region.
- ❖ With regard to the external challenges, curriculum planners should response to globalization, and technological progress, radical transformation in the work field, increasing social inequalities, progress of democracy and human rights, multiculturalism, the feeling of insecurity, and moral decline.

In addition, the third type of challenges may be summarized as: universal literacy, shortage of highly skilled human resources, reconciling traditional orientation with the aspiration for modernity, privatization of school, diversification of the economy, the need to invest more in education research. The challenges in the development of curriculum are categorized in to three, namely.

Role of teacher in curriculum development

A teacher is a person who has shaped the destinies of many great people who in turn have created the history. Teacher only can understand the psychology of the learner. Teachers also play the role as evaluator for the assessment of learning outcomes. So teachers must possess some qualities such as planner, designer, manager, evaluator, researcher, decision maker and administrator. Teachers play the respective role for the each step of curriculum development process. While developing curriculum, the teachers should analyze philosophy, social forces, needs, goals and objectives, treatment of knowledge, human development, learning process & instruction, and decision.

- ❖ Curriculum preparation involves systematic data, content, selection, collection, assessment, organization.
- ❖ Curriculum development phases consist of instructional development, materials & media development, methods of teaching & testing.
- ❖ Implementation of the curriculum involves instructional scheme of each subject to be completed in the semester, planning the lessons as per the timetable, using the transactional strategies, using the appropriate media, providing the learning resources, promoting classroom learning experiences, progressive testing.
- ❖ Curriculum evaluation involves, intra-curricular evaluation, teacher evaluation of students, student evaluation of teachers, materials evaluation, verification of methods, Evaluation of tests and examinations, Checking the learning outcomes while on the field, Curriculum review/improvement/ change/ modification, system revision.

After evaluating the prepared curriculum it is observed that the curriculum is not satisfactory then developer turns for revising and improving phase.

Suggestions

The curriculum development process can be improved by following ways:

- Need based analysis of curriculum,
What is the requirement of institutions?
Which types of skills are incorporated in the students?
How can be bridge the gaps between the theory and real life situation?
- Taking feedback of stakeholders is one of curriculum developments strategy,
- Use of technology for fulfilment of demands of stakeholders,

- Revision of curriculum is done for each five years, etc.
- The seminars, panel discussions, orientation programmes and workshops must be arranged for involvement of teachers as curriculum developer
- Curriculum developers must follow some of the principles of curriculum development such as conservative principle, forward looking principles, creation principle, activity principle, child centered principle, flexibility principle, leisure principle, character building principles, and dignity of labour principle. Also the principles of maturity, preparation for real life, linking with life, individual difference, loyalties, core or common subjects, all round development of body, mind and spirit, democracy, secularism, socialism etc.

Conclusion:

Curriculum development is intellectual and research activity. It needs the skilful programmers for planning. Developing, designing, implementing, evaluation and improving phase. Teachers know the needs of all stakeholders to teacher education. Teachers can understand the psychology of the learner. Teachers are aware about the teaching methods and teaching strategies. Teachers also play the role as evaluator for the assessment of learning outcomes. Teacher can be worked as planner, designer, manager, programmer, implementer, coordinator, decision maker, evaluator, research etc. So teachers can play important role in the process of curriculum development for teacher education.

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ICT in Higher Education

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Introduction

Education should be a three-fold process of imparting knowledge, developing skills inculcation proper attitudes and values towards life and society in general. It must enable the individual to develop the activity skill. To earn and carry on reasonable standard of living, it must also enable him to develop his creative faculties to the utmost so that intellectually, morally, physically and spiritually he is in a position to enrich his personality. The Indian higher education system has witnessed significant expansion in recent years, both in terms of the number of institutions as well as the student enrollment. India has more than 400 universities and over 20,000 colleges, of which almost half were set up in the last decade. Student enrollment has crossed 15.9 million in 2012-13, clocking a compounded annual growth rate of 6.2% since 1985-86. The private sector has enthusiastically participated in the growth of the higher education system with about 63% of the total higher education institutions being private unaided institutions. University Grant Commission (UGC) released a report, “Higher Education in India at a glance” summarizing key data points of relevance for policy makers and administrators.

Education

Education in its general sense is a form of learning in which the knowledge, skills, values, beliefs and habits of a group of people are transferred from one generation to the next through storytelling, discussion, teaching, training, and or research. Education may also include informal transmission of such information from one human being to another. Education frequently takes place under the guidance of others, but learners may also educate themselves (autodidactic learning). Any experience that has a formative effect on the way one thinks, feels or acts may be considered educational. Education is commonly and formally divided into stages such as preschool, primary school, secondary school and then college, university or apprenticeship. The science and art of how best to teach is called pedagogy. Education began in the earliest prehistory, as adults trained the young in the knowledge and skills deemed necessary in their society. In pre-literate societies this was achieved orally and through imitation. Story-telling passed knowledge beyond skills that could be readily learned through imitation, formal education developed. Schools existed in Egypt at the time of the Middle Kingdom.

Higher Education

University of Bologna is the first institution of higher education and research of all history, located in Bologna, Italy. It is an optional final stage of formal learning that occurs after secondary education. Higher education is an educational level that follows a completion of a school providing a secondary education, such as a high school, secondary school, or gymnasium. Tertiary education is normally taken to include undergraduate and postgraduate education, as well as vocational education and training.

Educational Technology

Is the effective use of technological tools in learning? As a concept, it concerns an array of tools, such as media, machines and networking hardware, as well as considering theoretical perspectives for their effective application. Educational technology includes numerous types of media that deliver text, audio, images, animation, and streaming video, and includes technology applications and processes such as audio or video tape, satellite TV, CD-ROM, and computer-based learning, as well as local intranet/extranet and web-based learning. Information and communication systems, whether free-standing or based on either local networks or the Internet in networked learning, underlie many e-learning processes.

ICT in Higher Education

The Information and Communication Technology (ICT) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer, and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. When such technologies are used for educational purposes, namely to support and improve the learning of students and to develop learning environments, ICT can be considered as a subfield of Educational Technology. ICTs in higher education are being used for developing course material; delivering content and sharing content ; communication between learners, teachers and the outside world; creation and delivery of presentation and lectures; academic research; administrative support, student enrolment etc. In the current information society, people have to access knowledge via ICT to keep pace with the latest developments. In such a scenario, education, which always plays a critical role in any economic and social growth of a country, becomes even more important. Education not only increases the productive skills of the individual but also his/her earning power. It gives them a sense of wellbeing well as capacity to absorb new ideas, increase their social interaction, gives access to improve health and provides several more intangible benefits. The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counseling, interactive voice response system, audiocassettes and CD ROMs have been used in education for different purposes.

Advantages for ICT in Education

1. Through ICT, images can easily be used in teaching and improving the retentive memory of students.
2. Through ICT, teachers can easily explain complex instructions and ensure students' comprehension.
3. Through ICT, teachers are able to create interactive classes and make the lessons more enjoyable, which could improve student attendance and concentration.

Disadvantages

1. Setting up the devices can be very troublesome.
2. Too expensive to afford
3. Hard for teachers to use with a lack of experience using ICT tools

In view of ICT, education can be classified in **3 main** categories:

- E-learning
- Blended Learning and
- Distance Learning

E-Learning or Electronic learning is a general term used to refer to computer-enhanced learning. It is commonly associated with the field of advanced learning technology (ALT), which deals with both the technologies and associated methodologies in learning using networked and/or multimedia technologies. It is also known as online learning. Distance education provided the base for e-learning's development. E-learning can be 'on demand'.

E-learning has the following advantages:

- Eliminating time and geographical barriers in education for learners as well as teachers.
- Enhanced group collaboration made possible via ICT.
- New educational approaches can be used.

Blended Learning is the combination of multiple approaches to learning. It is usually used to define a situation where different delivery methods are combined together to deliver a particular course.

These methods may include a mixture of face-to-face learning, self-paced learning and online classrooms.

Face to face Learning refers to learning that occurs in a traditional classroom setting where a faculty member delivers instruction to a group of learners. This could include lectures, workshops, presentation, tutoring, conference and much more.

Self paced Learning provides the flexibility to learn according to the availability of learners' own time and pace, it occurs in a variety of ways such as: reading specific chapters from text book, studying course material presented through web-based or CD based course, attending pre-recorded classes or sessions, reading articles referred by faculty member, working on assignments & projects, and searching & browsing the internet.

Online Collaborative Learning involves interaction between learners and faculty members through the web; this interaction can occur in one of the following modes:

- Synchronous interaction.
- Asynchronous interaction.

Distance Education

It is a type of education, where students work on their own at home or at the office and communicate with faculty and other students via e-mail, electronic forums, videoconferencing, chat rooms, instant messaging and other forms of computer-based communication. It is also known as open learning. Most distance learning programs include a computer based training (CBT) system and communications tools to produce a vital classroom. Because the Internet and World Wide Web are accessible from virtually all computer platforms, they serve as the foundation for many distance learning systems.

Initiatives for ICT use in Non-Formal Education

Some initiatives toward the use of ICT in non-formal education include:

- Computer Based Functional Literacy Program (2004) with Tata Consultancy Services in Andhra Pradesh, Tamil Nadu, Madhya Pradesh, Maharashtra, Uttar Pradesh and West Bengal (Tata Literacy Programme Website).
- Hole-In-The-Wall Training Systems (2002 – 2003) developed by NIIT, for which the International Finance Corporation, a World Bank subsidiary invested \$1.6 million for computer kiosks in more than 60 locations to enable underprivileged children in India to learn from a web-based curriculum(UNESCO Website (b)).
- India IT Freedom Project (2002) was launched in Andhra Pradesh in partnership with Freedom Scientific Inc., USA. The project seeks to make ICT accessible to visually challenged learners by the use of screen reading software. (The Hindu, August 6, 2002, and UNESCO Website) The UNESCO Website provides details of various other programs for ICT use in the non-formal sector.

ICT for Special Needs

There are some Government as well as private initiatives (Agarwal, 2003) exploring the use of ICT for persons with disabilities (PWD), for example,

- IIT Chennai has developed a local language editor with speech recognition capabilities available in 15 Indian languages along with English.
- IIIT Hyderabad recently developed a software to read web pages written in Hindi or Telugu.

- The National Association for the Blind, Delhi, is developing a library of electronic educational material for PWDs. Some 1500 titles will be stored using a format accessible with a screen reader.
- In 2003, work began on Screen Access For All (SAFA), an open source initiative to develop a screen reading software for vision impaired persons to read and write in their language of choice.

Recommendation for ICT for Higher Education

ICT-based interventions must take into account current institutional practices and arrangements. Specifically, drivers and barriers to ICT use need to be identified, including those related to curriculum and pedagogy, infrastructure, capacity building, language and content, and financing. The specification of educational goals at different education and training levels as well as the different modalities of use of ICTs that can best be employed in pursuit of these goals. This requires of the policymaker an understanding of the potentials of different ICTs when applied in different contexts for different purposes, and an awareness of priority education needs and financial and human resource capacity and constraints within the country or locality, as well as best practices around the world and how these practices can be adapted for specific country requirements. The piloting of the chosen ICT-based model. Even the best designed models or those that have already been proven to work in other context need to be tested on a small scale. Such pilots are essential to identify, and correct, potential glitches in instructional design, implement ability, effectiveness, and the like. The specification of existing sources of financing and the development of strategies for generating financial resources to support ICT over the long term.

Conclusion

The increasing use of information and communication technologies (ICTs) has brought changes to teaching and learning at all levels of higher education systems (HES) leading to quality enhancements. Traditional forms of teaching and learning are increasingly being converted to online and virtual environments. There are endless education not only improves classroom teaching learning process, but also provides the facility of e-learning. ICT has enhanced distance learning. The teaching community is able to reach remote areas and learners are able to access qualitative learning environment from anywhere and at anytime.

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Higher Education in Commerce – Challenges and Opportunities

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Introduction

Commerce is one of the three fundamental academic streams, the other two being humanities and science. Commerce is a division of trade or production which deals with the exchange of goods and services from producer to final consumer. It comprises the trading of something of economic value such as goods, services, information or money between two or more entities. While pursuing a course in the field of commerce, one acquires the knowledge of business or trade, nature and fluctuations in market, basic of economics, fiscal policies, industrial policies etc. The concept of commerce consists of a wide range of interdisciplinary branches including accountancy, Business Administration, E-Commerce, Finance, Economics and Marketing. Since the Indian economy is one of the fastest growing economies among the third world countries, the need for talented professionals, who can contribute towards the growth of the economy, is increasing. To serve the purpose, many commerce colleges in India are imparting quality education. A commerce aspirant can pursue course related to the field at any of the colleges and work on organizations that deal with finance and commerce. Several commerce colleges and institutes in India are imparting courses in the field of commerce at the undergraduate and postgraduate levels.

Meaning of Commerce

Commerce is the strongest and most influential social institution in all societies these days. It is a social institution which provides goods and services. Commerce is operated for a profit—that is, individuals using the system find it advantageous to pay a money price to have other individuals make goods and render services for them. Commerce is owned privately by individuals or group of individuals or by government or partly by Government and partly by individuals; it competes with other commercial units to make goods and render services of the highest quality, at the lowest prices and in the shortest possible time; and it is regulated by the Government.

Challenges before commerce education

Presently, the business world feels that the commerce graduates and postgraduates degree holders lack in right kind of skills, practical knowledge and exposure to outside business world which are needed. To realize the mismatch between the product and the demand, there is an urgent need to overcome the existing business education system and require coping up with the fast changing Liberalization, Privatization and Globalization era. The problems faced by the commerce graduates and post-graduates are of a great concern for the students, academicians, business world and even for parents, as the students are only oriented towards classroom theoretical related skills, lack of communication skills, lack of IT knowledge and global scenarios etc. Therefore, there is an urgent need to explore some measures to overcome these challenges. After completing course in the fields of commerce & management student can encourage joining any private or government organization as a specialist in any the streams of commerce and they can also pursue professional courses such as Chartered Accountant, Cost and works accountant, Company Secretary, Chartered Financial Analyst, a graduate in commerce can undergo careers in Financial Services fund manager, and security dealer and also a good entrepreneur etc. commerce graduates can further pursue careers in Management Such as i) Personnel Management ii) Production Management iii) Financial Management iv) Marketing Management v) Materials management vi) Hotel Management vii) Hospital Management viii) Tourism Management ix) Event Management x) Office Management xi) Export/Import Management etc.

E-commerce

E-commerce education a excellent future education. E-commerce provides multiple benefits to the consumers in the form of availability of goods at Lower cost eider choice and saves time. The general category of E-commerce can be broken down in to two parts; E-merchandise and E-finance. E-commerce involves conducting business using modern conducting business using modern communication instruments: telephone, fax, e-payment, money transfer systems, e-data interchange and the Internet. Online business like financial services, travel entertainment and groceries are all likely to grow. Forces influencing the distribution of globe e-commerce and its form include economic factors, political factor, cultural factors and supranational institutions. E-Commerce as anything that involves an online transaction. This can range from ordering online, through online delivery of paid content to financial transactions such as movement of many between Bank accounts.

M-Commerce

M-Commerce is the Force of E-Commerce's future. Both the telecommunications industry and the business world are starting to see M-Commerce as a major focus for the future scope of commerce education.

Opportunities for students

Traditional, time-tested avenues of employment making way for newer opportunities and career paths, and today, most students are faced with a bewildering array of choices of colleges, study subjects, fields of specialization and methodologies. Students are faced with the unenviable task of having to make choices based on popular opinions or trends. Very few, if any make choices based on potential and real aptitude. This means that most new entrants in the professional field are there because they hope that they are in the right place and not necessarily because that is what like and are good at doing. Apart from this, we will find that with newer seats of higher education opening up across difficult. Highlighting one's abilities and hidden or unique strengths become even more crucial in the race to stand out from the crowd. Graduates from institutes located in unusual geographies will be hit even harder with a new class structure based on one's graduating institute rather than one's merit emerging. Bothe companies and job eskers lose in the ensuring chose. As companies resört to greater eliminatory tactics, they run the risk of letting real talent ship through the employment net.

Conclusion

Commerce education provides immense opportunities to the students for employment but due to lack of employable students, the advantage is not being taken to its fullest extent. Here the participants viz. university, colleges, faculty, students and society at large along with the regulatory body and Government are equally responsible for the state of the affairs today. All needs to come and work together selflessly to bring positive changes in the interest of the students without which the future of the students will be at further risk, the implication of which will affect the nation building-the key objective of education.

ஏழைகளின் எட்டாக் கனி - புதிய கல்விக்கொள்கை

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2016-ல் வரையறுக்கப்பட்டுள்ள புதிய கல்விக் கொள்கையின் பல திட்டங்கள் எதிர்காலத் தலைமுறையினரைப் பாதிக்கும் வகையில் அமைந்துள்ளது. குறிப்பாகப் பெண்கள், தாழ்த்தப்பட்டோர், பிற்படுத்தப்பட்டோர், ஏழைகள், பழங்குடிகள், மாற்றுத்திறனாளிகள், திருநங்கையர் ஆகிய பிரிவினருக்கு உயர் கல்வியை மறுக்கும் வகையில் அமைகிறது. கடந்த கல்விக் கொள்கையின் விளைவே கல்வி தனியார்மயம் ஆனதாகும். இதைவிட மோசமான ஒரு சூழலை எதிர்காலத் தலைமுறையினர் சந்திக்கும் வகையில் புதிய கல்விக்கொள்கை அமைகிறது.

குறைந்த மாணவர் எண்ணிக்கையும், உள்கட்டமைப்புக் குறைபாடும் கொண்ட பள்ளிகள் மூடப்பட்டு, அவை அருகிலுள்ள பள்ளிகளுடன் இணைக்கப்படும் போது ஏழை, எளிய மாணவர்கள் குறிப்பாக, பெண்களுக்கு கல்வி கிட்டாமல் போகும். உழைக்கும் மக்களாக இருக்கும் கிராமப்புற மக்களின் குழந்தைகள் ஆரம்பக்கல்வி கூட கிடைக்காமல் தள்ளப்படும் ஆபத்து உள்ளது. மாணவர்களைப் பத்தாம் வகுப்பிலேயே உயர்கல்விக்குரியவர்கள், தொழிற் கல்விக்குரியவர்கள் எனத் தரம் பிரிக்கும் போது முதல் தலைமுறை மாணவர்கள் முறையான உயர் கல்வியில் இருந்து வெளியேற்றப்படுவர். இளம்பருவத்திலேயே உடல் உழைப்புத் தொழிலுக்குத் தள்ளப்படுவர்.

உயர்கல்வியில் தனியாரையும், வெளிநாட்டு நிறுவனங்களையும் அனுமதிப்பது ஏழைகளின் வாய்ப்பைப் பறிப்பதாக அமைகிறது. பொருளாதாரத்தில் உயர்ந்தவர்களுக்கே உயர்கல்வி வாய்ப்பாக அமையும். இந்த இடைவெளி தொழிற்கல்வி படித்த உழைக்கும் மக்களின் பிள்ளைகள் பன்னாட்டு நிறுவனங்களில் கணினி, எந்திரங்களை இயக்குதல், பொருள்களை விற்பனை செய்தல், கட்டுமானத் தொழிலாளர்களாகப் பணியாற்றுவதில் என்ற நிலைக்குத்தான் செல்வர். அதே நேரம் உயர்கல்வி பெற்ற உயர் வர்க்க பிள்ளைகள் அதிகாரப் பரவல் மிக்க பணிக்குச் செல்லவும் வாய்ப்பாகும். உயர் துறையிலும் இடம் பிடிக்கும் இவர்களே சமூகத்தின் பொருளாதாரத்திலும் ஆட்சி அதிகாரத்திலும் பங்குவகிப்பர்.

சமஸ்கிருத மொழி திணிப்பு, யோகா பாடத்திட்டம் போன்றவை வேற்றுமையில் ஒற்றுமை பாராட்டும் இந்தியப் பண்பாட்டிற்கு ஊறுவிளைவிப்பதாக அமையும். யோகாவைப் பள்ளி அங்கீகாரத்திற்கான நிபந்தனையாக வைப்பது இந்துத்துவ கருத்தியலை மாணவர்களிடம் விதைப்பதாகவே முடியும். ஒரு குறிப்பிட்ட பண்பாடே சிறந்தது என்றும் அதை மற்றவர்கள் மீது திணிப்பதும், அந்தப் பண்பாட்டை முன்னிறுத்தி மற்ற பண்பாடுகளை அழிக்க நினைப்பதும் தேசியவாதமாக அமையும். அது தேசப்பற்றை வளர்க்க உதவாது என்பது திண்ணம்.

கல்வி நிர்வாகம் முழுமையாக மாநில அரசுகளின் பொறுப்பில் இருந்தது. அதில் மத்திய அரசு படிப்படியாக அதிகக் கட்டுப்பாடு செலுத்தத் தொடங்கியது. எனினும் பாடத்திட்டம் மாநில அதிகாரத்திற்கு உட்பட்டதாக அமைந்தது. ஆனால் இந்தப் புதிய கல்விக் கொள்கை மாநில அரசின் அனைத்து அதிகாரங்களையும் பறிக்க முயல்கிறது. அது மாநிலங்களின் அதிகாரப் பரவலைக் கேள்விக்குள்ளாக்கிறது. மத்தியில் கட்டமைக்கப்படும் பாடத்திட்டம், மாநில மக்களின் பண்பாட்டோடு வளரும் குழந்தைகளுக்கு அந்நியமாக அமையும். குழந்தைகள் ஏற்கனவே அறிந்தவற்றை அடிப்படையாகக் கொண்டு, அதன்மேல் கல்வி கட்டமைக்கப்பட வேண்டும் என்பதே உலக அளவில் கல்வியாளர்கள் ஏற்றுக் கொள்ளும் கருத்தாகும். கல்விக்கான மொத்தச் செலவில் 84% மாநிலங்களின் பங்காக இருக்கும் பொழுது மாநில அரசுகள் கல்வி உரிமையை இழக்க நேரிடுகிறது.

ஆசிரியர்களுக்கு மூன்றாண்டுகளுக்கு ஒருமுறை ஆசிரியர்கள் திறன் மேம்பாட்டுப் பயிற்சி பெறவேண்டும்; ஐந்தாண்டுகளுக்கு ஒருமுறை திறனறியும் தேர்வில் தேர்ச்சி பெறவேண்டும்; பணி உயர்வும், ஊதிய உயர்வும் பணிமூப்பு அடிப்படையில் அன்றி திறமை, தனிப்பயிற்சி ஆகியவற்றின் அடிப்படையில் அமைவது ஆசிரியர்களை வெகுவாகப் பாதிக்கும்.

“ஆசிரியர் என்பவர் வகுப்பறையில் ஒரு கலைஞர், ஓர் ஆய்வாளர், ஓர் அரசியல் செயல்பாட்டாளர்” என்கிறார் பவுலோ பிரையரே. அந்த நிலையை மாற்றி ஆசிரியர்களின் சுதந்திரச் சிந்தனை, கற்பித்தல் திறன் ஆகியவற்றை வெகுவாகப் பாதிக்கும். ஆசிரியர்களுக்கான தொடர்பயிற்சி என்பது ஏற்றுக் கொள்ளக் கூடியது. ஆனால் தேர்வு என்பது ஆசிரியர்களின் கற்பித்தல் செயல்பாட்டை முடக்கிவிடும். ஆசிரியர்கள் இந்தியக் கல்விப்பணி (Indian Education Service) என்கிற அதிகார வர்க்கத்தின் கீழ் பணி செய்ய நேரிடும் பொழுது ஆசிரியர்கள் நிர்வகிக்கப்படும் பணியாளர்களாக மாற்றம் பெறுவர். அதனால் கற்பித்தலும், மாணவர்கள் முன்னேற்றமும் தேக்கமாகும்.

சிறுபான்மை கல்வி நிறுவனங்களின் அரசமைப்புச் சட்ட பாதுகாப்பை இந்தப் புதிய கல்விக்கொள்கை பொருளற்றதாக்குகிறது. சிறுபான்மை கல்வி நிறுவனங்கள் அவர்தம் கலாச்சாரத்தையும், தத்துவத்தையும் பிரதிபலிக்கும் நிறுவனங்களாகும். யோகா, சமஸ்கிருதம், வேதகல்வி போன்றவற்றை கட்டாயமாக்கும் பொழுது அவற்றின் அடையாளங்கள் அழிந்து போகும். இது அரசமைப்புச் சட்டதிற்கு எதிராக உள்ளது.

குழந்தைத் தொழிலாளர்களின் வயது வரம்பை 14ல் இருந்து 18 ஆக உயர்த்த சமூக ஆர்வலர்கள் போராடி வரும் சூழலில் குழந்தைத் தொழிலாளர்களின் புதிய சட்டம் 14 வயதிற்கு மேற்பட்ட 18 வயதிற்குட்பட்ட சிறுவர்களை அபாயகரமான தொழில்களில் பணியமர்த்துவதற்கு அனுமதி அளிக்கிறது. ஒருபுறம் ஐந்தாம் வகுப்பிற்கு மேல், திறன் குறைந்த ஏழைக் குழந்தைகளுக்குத் தேர்ச்சி அளிக்காமல் உடல் உழைப்பிற்கு தள்ள அரசே நேரடியாக வழிவகை செய்கிறது. 2011 ஆம் ஆண்டு கணக்கெடுப்பின் படி இந்தியாவில் 43,53,247 குழந்தைத் தொழிலாளர்களில் 80 விழுக்காடு குழந்தைகள் தாழ்த்தப்பட்ட சாதியினர் என்றும், 20 விழுக்காடு குழந்தைகள் பிற்படுத்தப்பட்ட சாதியினர் என்பதும் குறிப்பிடத்தக்கது. இந்தப் புதிய கல்விக்கொள்கை ஏழைகளுக்கும், ஒடுக்கப்பட்ட சாதியினருக்கும் எதிராக அமைகின்றது.

ஒடுக்கப்பட்ட உழைக்கும் ஏழை மக்களை நிராகரித்துவிட்டு, இந்தப் புதிய கல்விக் கொள்கையில் இடம்பெறும் பாடத்திட்டத்தைப் புதுப்பித்தல், தேர்வுச் சீர்திருத்தம், தொழில்திறமை, வேலைவாய்ப்பு, கல்வியில் தகவல் தொடர்பு நுட்பத்தின் பயன்பாடு, உயர்கல்வியின் ஆளுகை சீர்திருத்தங்கள், உயர்கல்வியின் தர உறுதிப்பாடு, கல்வியைப் பன்னாட்டு மயமாக்கல், ஆராய்ச்சி, நிதி மேம்பாடு போன்ற அத்தனையும் ஏழை – பணக்காரன் என்ற ஏற்றதாழ்வை அதிகமாக்கி, ஏழையை மேலும் ஏழையாக்கவும், பணக்காரனை மேலும் பணக்காரனாக்கும் வாய்ப்புகளை அள்ளித்தருகிறது.

துணைநின்ற நூல்கள் :

1. தேசியக் கல்வி கொள்கை முன்வரைவு – 2016
குறள்நெறி பதிப்பகம்,
5/664, 12-ஆம் தெரு, பாரதிபுரம்,
கருப்பாயூரணி, மதுரை -625020.
2. இன்றைய இந்தியக் கல்வி சவால்களும் தீர்வுகளும்
கட்டுரைத் தொகுப்பு,
சுவத் விஷன்,
சென்னை-600066.

ICT – AN INEVITABLE TO OL IN PRESENT DAY EDUCATION

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Introduction

Education is the integral part in the development of any nation or an individual. Prime activities in the process of education are Teaching and Learning. Evaluation is a measure to validate both the process of teaching and learning. Teaching is a multidimensional process which not only gives information to the learners, but also should develop understanding and application of concepts, expression power, thinking power, logical reasoning, decision making ability etc. Teaching will be successful when the learner imbibes the content that was taught not only with ease but also with interest, ie, scaffolding the learners to the process of learning. Thus during the process of teaching, a teacher should involve various learning resources and activities that support students learning, and allow teachers to facilitate learning. Teaching strategies, techniques or approaches adopted changes from time to time as new tools are emerging due to scientific advancements. For example we started writing on the sand, followed by paper and now it is the time of e-slate and e-pen.

Information and Communication Technology

Advent of computers followed by the networking of computers gave birth to Information Technology. According to Sansanwal (2000) Information Technology is the use of hardware and software for efficient management of information, ie, storage, retrieval, processing, communication, diffusion and sharing of information for social, economical and cultural upliftment. The Information technology leads to development of websites. Government, Corporate, Educational institutions etc, started uploading the information on their websites. It opens up a new source of information which decreased the limitation of access to information. IT during initial days was limited only to the textual mode of transmission of information with ease and fast. Later, IT started transmitting audio, video or any other media to the users, which is now referred as ICT (Information and Communication Technology). ICT have opened new avenues like learning, e-learning, e-coaching, e-journals, e-education etc.

Advantages of ICT in Education

Updated Information

ICT Provides up to date information on any particular subject/topic as different websites can be accessed at one click.

Tutorials

Different websites explains a particular topic in different formats, so learners have the choice to select the format which he/she can understand and follow.

Simulations

Explanations in the form of simulations improve the understanding of the topic. For example, in biology, the explanation for the structure of the heart followed by vascular system and how they are connected to respiratory system gives better insight about the mechanism of circulation and respiration.

3D View

Three dimensional view of an object with 360 degree rotation helps better learning. For example the three dimensional view of enzymes helps us to understand the mechanism of enzyme action, drug discovery, identification of active sites in the proteins and enzymes etc.

Images & Videos

Websites are loaded with images and videos which will take the level of understanding to new heights. For example viewing the process of circulation and other physiological process helps the biologists to understand the process easier.

E-content

E-contents prepared by eminent persons on the field are available for ready access which can be used by the learners to enrich their knowledge.

E-assignment

To encourage self study, it is common that learners are asked to prepare assignments. By providing enormous informations ICT encourages self learning.

Becta (2003) has indicated that the success of the integration of new technology into education varies from curriculum to curriculum, place to place and class to class depending on the ways in which it is applied. It is very clear that ICT in the classroom has many advantages. At the same time implementing ICT effectively is a great challenge. To implement ICT in an educational institution it requires certain facilities, similarly the Faculties also needs certain qualities.

Qualities for a ICT-Teacher

Computer Literacy alone will not be useful to a Teacher to become a competent ICT enabled Teacher. Supplementary learning associated with integration of ICT, knowledge on different available softwares with which the teaching-learning process can be made more interactive. Moreover, The Teacher should have the attitude of continuous learning and changing the teaching skills, as teaching is a continuous learning process.

Along with knowledge on how to operate the computer, Teachers should get educated in handling the different equipments used in the ICT classrooms like LCD Projectors, Internet modoms, scanners, smart board etc, ie, technical knowledge along with minor error rectification.

Facilities in an Institution for ICT

To effectively implement ICT enabled teaching in an educational institution, the institution should have sufficient number of latest versions of computers, LCD projectors, faster internet connectivity, new softwares, smart board etc. The institutes should also have technical assistants to assist, train and help both teachers and the learners.

Conclusion

Effective Learning requires understanding the content. In order to improve the level of understanding Teachers are using different tools since Gurukool Age. Advancements and inventions in the field of science and technology have revolutionized the method of present day teaching and learning process. ICT has become an inevitable tool in the present day education as it is both Teacher friendly and Student friendly changing the role of a teacher into a facilitator.

One teaching tool may replace another. But nothing can replace a GOOD TEACHER.

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E-learning and Hybrid Teaching

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1. Introduction and Background

Through the past decades, the world of education has been varied by the fast and rapid revolution in computer and the Internet technologies so new findings are generated and become established at breathtaking speed. This has revolutionized teaching and learning particularly distance education. The arrival of World Wide Web (WWW) has increased the demand for distance education and concepts like online learning or e- learning has emerged, as a result. The system of online learning has been largely used in higher education, and a lot of studies have been done to discover both its strengths and weaknesses.

Since e-learning environments present some disadvantages such as inhibiting the socialization process of individuals resulting in lack of face-to-face communication; a new environment has surfaced. This new environment combines the e-learning and the classical learning environments. It has been termed as blended learning, hybrid or mixed learning. The foremost goal of blended instruction was to overwhelm drawbacks of pure online instruction. Since either pure e-learning or traditional learning hold some weaknesses and strengths, it is better to mix the strengths of both learning environments to develop a new method of delivery called blended learning. In view of that, the application of blended instruction has quickly increased because instructors believe that varied delivery methods can increase students' satisfaction from the learning experience as well as their learning outcomes.

The following section provides extensive reviews of relevant literature about online and blended learning. Different interpretations for the term "Blended Learning" and its usefulness and effectiveness are further discussed.

2. What is blended?

The body of literature on blended learning proves that there is no unity on the definition of blended learning. Driscoll (2002) defined blended learning as a combination of instructional methods. On the contrary, Delialioglu and Yildirim (2007) claimed that systematic and strategic combination of ICT tools into academic courses introduces a new way to approach instructional goals. This instructional method has been given many names: blended learning, mediated learning, hybrid instruction, web-assisted instruction or web-enhanced instruction. They believed that blended learning is the same as hybrid instruction, which combines the potentials of web-based training with those of classroom techniques. Likewise, through their study on the transformational potential of blended learning, Garrison and Kanuka (2004) found that blended learning environments seize the values of traditional classes, which improve the effectiveness of meaningful learning experiences. In a more conservative side, there are three most common definitions of blended learning:

1. A combination of instructional modalities (or delivery media)
2. A combination of instructional methods
3. A combination of online and face-to-face instruction

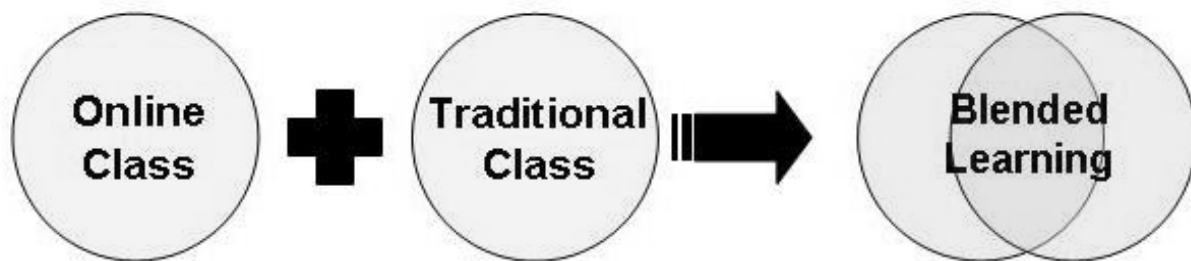
However, the third definition is mostly accepted by scholars. Picciano (2006), for instance, declared that there are two significant elements in defining blended learning and those are online and face-to-face instructions. Moreover, Rovai and Jordan (2004) claimed that blended learning is a mixture of online learning and classroom that contain some of the facilities of online courses with the presence of face-to-face communication. Other researchers believed that the systems called blended learning integrates face-to-face instruction with computer mediated one

Figure 1. Blended Learning Environment

This study applies Colin and Moonen's (2001) definition of blended learning i.e. "a hybrid of traditional face-to-face and online learning so that instruction occurs both in the classroom and online, and where the online component becomes a natural extension of traditional classroom learning"

3. Advantages of blended learning

Parallel with the growing use of ICT in the educational setting, blending learning approach can be contributing tools to complete face to face experiences . Besides, blended instruction offers an active learning environment with flexibility in using resources for the students and provides more time for faculty members to spend with learners in small groups or even individually (Oh & Park,



2009). In addition, blended learning has the potential to change students' experiences and outcomes through learning (Davis & Fill, 2007).

Hameed, Badii, and Cullen (2008) in their study considered the efficiency of e-learning when mixed with traditional learning; they concluded that blended learning approach provides the most flexible method to e-learning.

Another advantage of blended learning environments is its potential to offer many sources for learners. Azizan (2010) concluded that utilization of technology in physical classrooms offer extra resources for the students and this is expected to enhance learners' confidence and competence as well as improve the quality of learning. Chen and Jones (2007) outlined other advantages of blended learning such as deep understanding of topics by using web-based resources as well as active participation of students in class. Furthermore, online learning engagement provides an interactive setting for communication among teachers and students in the classroom and may facilitate cooperative activities even beyond the classrooms (Yuen, 2010).

The above discussion has identified the major benefit of applying blended instruction i.e. to overcome the shortcomings of online instruction and exploit various instructional process and delivery strategies in order to increase learners' satisfaction as well as boosting the learning outcomes.

4. Blended learning in use

Harrington (2010) coined the combination of traditional classes with online ones as ‘hybrid classroom’ and stressed that educators are increasingly engage in hybrid classes as they have become aware of the benefits. Moreover, she emphasized that most EFL/ESL students enroll in hybrid classes too.

Blended learning environment and their findings proved that students have generally positive opinions about blended learning environment. The results of the study also proved that high interaction between students and instructor exist in this type of environment, which indicated high demands for face-to-face interaction in on line learning.

There are three rationales for supporting blended learning: fulfilling the learner's needs and motivating critical thinking skills; the flexibility of blended learning since the learning occurs online and face-to-face and its cost effectiveness.

5. Sense of community in blended learning

Teachers and students communicate virtually via e-learning and this is the predominant feature of such a learning process, different from traditional classes in which instructors and learners engage in face-to-face interaction. Generally, all the terms which describe distance education via computer technology have a unique significance that is learning takes place while teacher and learner are separated. It is assumed that engagement in e-learning and virtual classes hinders e-learners from community interaction. By adding the human interaction to online learning, the educators have considered the human need for socialization which in turn will help the process of learning .

This sense of belonging to a community which its absence in online learning may disturb improvement of common emotions and feelings among learners and instructors. These are following definition of sense of community: “a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together”.

6. Mere online or blended learning?

Proponents of sole e-learning instruction like Lu and Chiou (2010) believe on some benefits of such educational environments like immediate communication, processing learning based on each individual pace, using web technology facilitators (email, chat, video conferencing), etc. Studying through online mode, however, revealed that the feeling of isolation is real and that this negative element is removed through blended learning. The blended learning environment motivates students to participate in online classes more eagerly as they have the opportunity to meet and discuss virtually with their classmates.

Perera (2010) concluded that compared to the virtual learning environment, blended learning offers a more successful learning experience since it contains some aspects of traditional classes. Moreover, mere virtual learning still consists of many problems in the area of education. Based on Hameed, Badii and Cullen (2008), sole e-learning courses is more demanding for instructors and more time commitment is expected of the teacher. Lack of interaction, will cause frustration and a sense of isolation which leads students to drop out so this drop outs are due to inadequate interactions of higher education students with peers and instructors. So, mere online instruction has been denied by many researchers and blended environment has been suggested because of its comprehensible advantages to the educational institutions. To concluded that instructions in a blended learning environment seem to be more transparent than using only online delivery format.

There are many problems for purely online instruction like limited hardware, software, time, money as well as pedagogical problems. This has lead to a new idea of mixing the benefits of face-to-

face courses with the benefits of online courses, known as blended learning. They believed that instructors can support their courses by online exercises, instant online feedback, and creating more valuable learning environments through hypermedia and multimedia.

7. Face to face interaction still matters

Face-to-face interaction communicates a lot of facial expressions, body language, tone of voice, and eye contact. In this regards, the brain needs and expects these more significant channels of information. If these are not available, the brain suffers to communicate and there is a high possibility that a misinterpretation might take place. Lewis (2006) also claimed that if we think we can know someone and embrace this experience through text, we are deceiving ourselves. Visual information and subtle emotions such as winks and smiles are crucial to communicate anything remotely and these do not exist in online learning. He added that there are many factors that affect human communication that cannot be explained through electronic communication and are more influential than we realize.

8. Conclusion

In a blended learning course i.e. the combination of face-to-face instruction with online platforms, students and teachers engage in using technology for active learning. Furthermore, they are allowed to share their experiences through such a brand environment (Figure 1). In addition, “blended learning provides more productive engagement among students in the online environment and in course content as well”

Therefore, designing a blended learning environment to reach a harmonious learning equilibrium between face-to-face interaction and online access is essential. Keeping this view in mind, blended environment provides an encouraging situation for both the traditional classrooms and the online settings. In other words, it is a range of delivery methods to meet the course objectives. To sum up, below are the advantages of blended learning over online learning environments as below:

- Increased communication • Engagement of face-to-face communication • Sense of community • Improved academic performance • Collaborative tasks • Adequate feedback • Active participation
- Providing help • Fun and practical manner of teaching and learning • Etc...

The above discussions have reviewed the many advantages of blended learning over traditional face-to-face classroom and online instruction. It can be concluded that those activities which are involved in the blended instruction can foster the sense of community belonging and remove the frustration created by mere online environment. The face-to-face element should not be replaced because of the significant effect of body language, tone of voice, facial expressions and eye contact on communication. These two educational settings namely e-learning and face-to-face learning can complement one another for pedagogical application.

This paper has presented the successful application of blended learning in distance learning especially in terms of students' learning experience, student-student interaction and student-instructor interaction. The blended learning approach is likely to emerge as the predominant instructional model in the future.

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Curriculum And Methods Of Teaching

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Introduction

This articles deals with the meaning of curriculum, different types, stages of curriculum, Higher education, Curriculum in other countries

CURRICULUM

The Education Commission (1964) defines school curriculum “as the totality of learning experience that the school provides for the pupils through all the manifold activities in the school or outside that are carried on under its supervision”. Curriculum does not mean only the academic subjects traditionally taught in the school, but it includes the sum total of experiences that a child receives at school. In this sense the whole life of the students at all points helps in the evolution of balanced personality”.

Curriculum is now sought to be made child centred, life centred and community centred.

Child centred

When our curriculum is based upon the needs and interests of the child we teach, it become child – centred.

Life centred

It is also life centred, When the child’s needs in his / her present life as well as those in his / her adult life later determine the nature of the learning experiences we provide to him.

Community centred

When the problem faced by the community the child belongs to become the starting point his / her learning process in the school.

The school and community are brought together by means of such a curriculum.

Curriculum – Different Stages

I. Pre – primary Stages

As regards the pre-primary stage the Education Commission (1964) thinks it to be more appropriate to talk of a programme of activities rather than a curriculum for this stage. It is in agreement with the recommendations of the committee on child care (1961- 1962) in respect of the activities to be promoted and they are given below.

1.Play activities

- a. Free play
 - b. Physical activities involving muscular and limp movement
 - c. Play involving contact, acquaintance, limitation and experience of physical family and social environment
 - d. Organized play and group activities
 - e. play ground activities using play- ground apparatus.
2. Physical training including simple exercises dance and rhythmic.

3. Manual activities and play, like gardening, simple chores and participating in simple community efforts.
4. Sensorial education using natural objects and specially constructed apparatus.
5. Hand – work and artistic activities involving the use of fingers and tools; and activities like drawing, painting and music and dancing.
6. Learning activities including language; personal hygiene and health rules ; elementary nature, study, involving contact with the physical, plant and animal world; counting and arithmetic and
7. Self-service in school eliminating as far as possible the use of servants and adult helpers.

II. Primary Stage

The sergeant Committee (1944) agreed that primary education in the country should, generally, be on the lines of the Basic education scheme.

According to the Educational Committee (1964) the curriculum at the lower primary stage should consist of

One language – mother tongue or the regional language.

- a. Mathematics.
- b. Study of the environment.
- c. Creative activities
- d. Work experience and social service.
- e. Health education

At the higher primary stage, classes v to viii it should consist of

- a. Two languages – the mother tongue or the regional language and Hindi or English.

The third language may be studied on an optional basis.

III. Secondary stage

The following is the curriculum suggested at the lower secondary stage.

- a. Three languages (in hindi speaking areas, hindi English and modern Indian language other than hindi).
- b. Mathematics
- c. Science
- d. History, geography and civics
- e. Art
- f. Work-experience and social service
- g. Physical education
- h. Education in moral and spiritual values

At the higher secondary stage the curriculum should consist of

1. Any two languages
2. Any three subjects out of 14 given
3. Work experience and social service
4. Physical education
5. Art or craft
6. Education in moral and spiritual values

Higher education

As regards the university stage as early as 1944 the Sargent Committee expressed its view that “the tutorial system should be widely extended and closer personal contacts be established between teachers and students”.

An important recommendation of the Radha Krishnan Commission (1948) relates to the provision of general education for all the students at the university stage in order to correct the extreme specialization which is now common in our intermediate and degree programmes.

Curriculum in other countries

In Britain there is now a wide range of general and special programmes from which the individual may choose according to his ability and interests.

The same is the position in USA too. In both the comprehensive type of high schools offer both the academic and nonacademic courses under the same roof, suited to the different abilities and aptitudes of students.

In conclusion the main trend in curriculum development noticed in the various countries of the world

1. Importance given to science and mathematics education
2. Provision for some form of manual work
3. Differentiated curricula to suit the different interests and abilities of the pupils
4. Vocationalization of the secondary stage
5. Postponement of specialization to the higher secondary stage.
- 6.

Conclusion

The aim of any programme of general education should be to prepare the pupils for an enlightened life in the community by developing in them an integrated personality. Education should make the individuals live for the community. This objective of education can be achieved by an individual through his environment or community.

It is only then that education can help bring about the development of the society of which he /she is a member. The most important advantage of integrating socially useful work in the curriculum of general education is to bring the community and the educational system in closer relationship so that both stand to gain mutually. The education must lead to the acceleration of individual excellence and through its acceleration of economic growth of his/her society.

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ICT Usage To Teach Physical Education Programme

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The present century is rightly technological century due to the influence of advancements in the field of science and technology on the varied aspects of life, resulting in its modernization. The impact of scientific and technological advancements on coaching is so great that it has given rise to new discipline called Educational Technology. Today's coaching and training practices are quite different from those of yesterday. Similarly, the practices in the upcoming century may be quite different from those of today. One can easily find out the explanation for these differences in the obvious impact of technological innovations and inventions. The shape of future sports is bound to change radically due to technological impact in the years to come. There is a greater need to gear coaching and training to meet the future requirements of the competitive world utilizing the technological devices (ICT) and chances. Technology has revolutionized the coaching and training system. It has come in to stay for the enrichment of coaching and instructional processes. It has greatly influenced the teaching, coaching and learning process.

The major problem of coaching in our schools and colleges is how to accommodate instruction to individual, differences of the learners. Educational technology has developed new innovate practices and strategies for this purpose. One such strategy is multimedia based on modular approach.

As coaches we expect much from our athletes, in turn, desire much more from their coaches. It is generally observed that the experiences of the athletes and the methods of a coaching used by those who coached them are carried into their coaching methodology when they become coaches later. Most of the veteran coaches have relied on only one educational resource. If the former coaches had weakness, those shortcomings probably remained in the next generation of coaches also.

Computer Assisted instruction or briefly known as CAI is an interesting innovation in educational technology. Its marvels have been demonstrated and seem to revolutions the whole spectrum of education. It has better flexibility and more versatile than any of the teaching machine. It can later to the individual needs of many students at a time pupils with reliability. The time taken by individual student is responding to a question and extent of correctness in the same is also recorded by the computer. All this helps the educator in planning instruction and providing relevant materials.

Teaching in Physical education helps to develop the physical abilities in general in addition to that it develops the knowledge of the sports sciences which is important to improve the sports performance. The problem is that some students find theory in physical education a boring one, with a huge amount of new vocabulary. It typically starts with kinesiology, rushes through biomechanics and Sports Medicine and tries to distinguish between Anatomy and Physiology, and Sports Psychology, Training Methods and so on. Many of the students lack the study skills to abstract the important ideas in a lecture or chapter, organize the information into a coherent whole, and then access that knowledge as required on tests. Words, either spoken or written, do not communicate ideas as well as images. Static listening to lectures or reading the textbook requires the students to build these images in their mind, and only the best few can really do this for themselves. The most successful courses involve hands-on laboratories in which students can explore and experience things for themselves, and take an active part in the learning process.

The ever-changing field of technology has made the world a smaller place, as information is easily and rapidly exchanged through devices of telecommunication. The Internet has proved a huge

advancement in the ICT community. Videoconferencing and distance learning allow people thousands of miles apart to speak together as if they were in the same room. ICT involves more than just sharing of information. It also includes the quest to improve communication throughout the world, especially to more underserved areas of the globe. For years PE teachers have been among the most proactive educators to harness the potential of ICT to enhance learning experiences for students. In particular, video analysis of performance has always been an important part of ICT use in PE, and although the methods employed in lessons today are obviously more advanced, the principles often remain the same. There are many good options available to physical educators in regards to technology. Many of these technologies are easily accessible and are easily incorporated into the curriculum.

Proper training should be provided to teachers and students in relation to the use of ICT tools through workshops, seminars or other courses. Specific equipments like digital video camera and visual analysis software should be provided to the P.E department in all school. Such equipments are costly. So the P.T.A and other sponsors must contribute to raise funds to buy such equipments. Internet facilities should be given to both teachers and students for good communication between departments, between teachers and students to raise standards of P.E, and also access to modern up to date technologies related to rules and regulations of sports. Heart rate monitors and pedometers are useful apparatus which are directly related to the health conditions of students. These instruments represent a source of motivation as students can check their own performance. Digital multi exercises allow students to practice their weight training safely in the gym especially during rainy days at school. Internet is a rich source to reach students and exchange meaningful information via email, face book and newsletter. Lesson plans can be given to students via on line for better assimilation of concepts. Students should be authorized to use their mobile phones with camera options to view their own or others' performances while performing a particular skill. Thus, we can see how valuable this digital video camera in teaching and learning of P.E. is. This can further enhance our cognitive domain as well as our psychomotor skills.

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ICT Based Learning In Higher Education: Challenges And Opportunities

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Education is the driving force of economic and social development in any country. Considering this, it is necessary to find ways to make education of good quality, accessible and affordable to all, using the latest technology available. The last two decades have witnessed a revolution caused by the rapid development of Information and Communication Technology (ICT). ICT has changed the dynamics of the various industries as well as influenced the way people interact and work in the society. Internet usage in home and work place has grown exponentially. ICT has the potential to remove the barriers that are causing the problems of low rate of education in any country. It can be used as tool to overcome the issues of cost, less number of teachers, and poor quality of education as well as to overcome the time and distance barriers. The world is home to seven billion people, one third of which are using the internet. 45 percent of the world internet users are below the age of 25 years. There are 5.9 billion mobile cellular subscriptions with global penetration are of 87%.

In India Telecom has become the second largest wireless network in the world after China. India has a billion-plus population and a high proportion of the youth and hence it has a large formal education system. The demand for education in developing countries like India has skyrocketed as education is still regarded as an important bridge of social economic and political mobility. The various kinds of ICT products available and having relevance to education such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts. Interactive radio counseling interactive voice response system, audio cassettes and CD ROMs etc have been used in education for different proposes. Today ICTs – including laptops wirelessly connected to the internet, personal digital assistants, low cost video cameras and 3G cell phones, and tablets PCs have become affordable, accessible and integrated in large section of the society throughout the world. It can restructure organizations, promote collaboration increase democratic participation of citizens, improve the transparency and responsiveness of governmental agencies, make education and health care more widely available, foster cultural creativity, and enhance the development in social integration. It is only through education and integration of ICT in education that one can teach students to be participants in the growth process in this era of rapid change.

ADVANTAGES OF ICT IN EDUCATION

There are many advantages of ICT based teaching and learning in Higher education. Some of them are given below:

- Increased access,
- Flexibility of content and delivery,
- Combination of work and education,
- Higher quality of education and new ways of interaction,
- Development of a new learning culture,
- Sharing of costs and of training time with the employees,
- Increased portability of training,
- Increase the capacity and cost effectiveness of education and training,
- To Support and enhance the quality and relevance of existing educational structures,
- To ensure the connection of educational institutions and curricula to the emerging networks and information resources and information resources,
- To promote innovation and opportunities for lifelong learning,
- Improving the efficiency of educational administration and management at every level from the classroom, school library, through the school and on to the sector as a whole.

NEED OF ICT IN EDUCATION

In the new educational system, there are likely to be four levels of learning. The first level will consist of student who, able to afford the high cost of education, will obtain it from either public or private institutions of higher education. They will be getting the best of facilities and will soon form education elites. The second level of learners will consist of intelligent and competent students, who unable to afford the cost of education, will obtain it from existing public institutions and will soon be competing with the first level for membership in educational elite.

A third level of students will consist of the academically and financially poor student who will seek access to education from lower quality institutions of higher learning. And the last group of learners would be most of the illiterates and the poor, whom we will be addressing as a part of our work. Current ways of imparting adult education use extensive ground work in the field and require both large numbers of trained personnel as well as committed individuals working in a world where access to technology is going to determine the gap between the haves and the have not's.

APPROACHES TO ICT INTEGRATION IN TEACHER EDUCATION

Use of ICT within teacher training programs around the world is being approached in a number of different ways with varying degrees of success. These approaches were subsequently described, refined and merged into following approaches:

ICT SKILLS DEVELOPMENT APPROACH:

Here importance is given to providing training in use of ICT in general. Student teachers are expected to be skilled users of ICT for their daily activities. Knowledge about various software, hardware and their use in education process is provided.

ICT PEDAGOGY APPROACH:

Emphasis is on integrating ICT skills in a respective subject. Drawing on the principles of constructivism, pre-service teachers design lessons and activities that center on the use of ICT tools that will foster the attainment of learning outcomes. This approach is useful to the extent that the skills enhance ICT literacy skills and the underlying pedagogy allows students to further develop and maintain these skills in the context of designing classroom-based resources.

SUBJECT –SPECIFIC APPROACH:

In this approach, ICT is embedded into one's own subject area. By this method, teachers/subject experts are not only exposing students to new and innovative ways of Learning but are providing them with a practical understanding of what learning and teaching with ICT looks and feels like. In this way, ICT is not an 'add on' but an integral tool that is accessed by teachers and students across a wide range of the curricula.

PRACTICE DRIVEN APPROACH:

Emphasis is given for providing exposure to the use of ICT in practical aspect of teacher training. Focus is on developing lessons and assignments. Using ICT and implementing it in their work experience at various levels provides students an opportunity to assess the facilities available at their school and effectively use their own skills.

ICT AS A LEARNING TOOL

E-Learning: is a learning program that makes use of an information network –such as the internet, an intranet (LAN) or extranet (WAN) whether wholly or in part, for course delivery, interaction and /or facilitation. Web based learning is a subset of e-learning and refers to learning using an internet explorer.

Blended Learning: refers to learning model that combines the face-to-face classroom practice with e-learning solutions. For example, a teacher may facilitate student learning in class contact and uses the moodle (modular object oriented dynamic learning environment) to facilitate out of class learning.

Constructivism: is a paradigm of learning that assumes learning as a process individuals “construct” meaning or new knowledge based on their prior knowledge and experience. Educators also call it the emerging pedagogy in contrast to the long existing behaviorisms view of learning.

LIMITATIONS OF ICT USE IN EDUCATION

ICT as modern technology that simplifies and facilitates human activities is not only advantageous in many respects, but also has many limitations. Many people from inside and outside the education system, think of ICT as “Panacea” or the most important solution to student problems and improvements:

- Over-reliance on ICT limits students critical thinking and analytical skills,
- Students often have only a superficial understanding of the information they download,
- Computer-based learning has negative physical side-effects such as vision problem,
- Students may be easily distracted from their learning and may visit unwanted sites,
- Students tend to neglect learning resources other than the computer and internet,
- Students tend to focus on superficial presentations and copying from the internet,
- Students may have less opportunity to use oral skills and hand writing,
- Use of ICT may be difficult for weaker students because they may have problems with working independently and may need more support from the teacher.

The Key Challenges of ICTs Integration in Education

The integration of ICTs in education systems may face various challenges with respect to policy, planning, infrastructure, learning content and language, capacity building and financing. ICT –enhanced education requires clearly stated objectives, mobilization of resources and political commitment of the concerned bodies.

The infrastructure challenges that may exist are absence of appropriate buildings and rooms to house the technology, shortage of electric supply and telephone lines, and lack of the different types of ICTs. Because of this, one need to deal with infrastructure related challenges before the planning of ICTs integration to education systems. With respect to challenges of capacity building, we have to develop competencies of teachers and school administrators for the successful integration of ICT in the education system.

CONCLUSION

The demand for access to higher education has increased with the rise in living standards and the trend towards a knowledge based society. At the same time rapid developments in information and communication technologies (ICT) have created new opportunities to enhance the reach and quality of education. The major promises of ICTs use in education systems of developing countries focus on training teachers in new skills and introducing innovative pedagogies into the classrooms, investing on ICT infrastructure for schools and creating networks among educational institutes, improving overall standard of education by reducing the gap in quality of education between educational institutions in urban and rural areas. If the ICT based learning and teaching is implemented with clear cut guidelines and with quality standards in Indian Higher education system, the country can meet the required GER of 30% by the end of 12th plan period.

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Online Assessment – An Igniter in Today's Scenario

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Introduction

Education is chiefly considered with developing and modifying patterns of behavior in human beings, in the realms of thinking, feeling and acting. It is important for the teachers to have a clear vision of their roles and responsibilities to provide the best for their students. The main purpose of the teaching whether it is a **traditional classroom or Online instruction**, it should influence pupil's behavior in the desired direction which is guided by the educational objectives formulated by the institutions or teachers.

The teachers must be conscious of the goals and aims of what they are teaching. More specifically the teacher must formulate instructional objectives of various units in the syllabus in a subject of study. Then he should be in a position to construct effective learning experiences on the basis of student's learning and the modes of effective communication channels. Finally, should determine to what extent these objectives are being achieved through conducting **Tests and Evaluation**. The most extended definition by C.E.Beeby (1977) for evaluation is "systematic collection and interpretation of evidence leading as a part of process to judgement of value with a view to action"

In teaching, evaluation is concerned with assessing the effectiveness of teaching, teaching strategies, methods and techniques. Two recent trends have recently converged in teaching field – a traditional classroom and Online instruction. The use of web – based learning is increasing around the world (Wrentling & Johnson, 1999). With the innovation, questions arise about the effectiveness and quality of practice with these web-based tools (McCollum, 1998 as cited by Wentling & Johnson, 1999). The Online setting fundamentally shifts human interaction, communication, learning paradigms and assessment technique. Quite a number of universities and institutions are using online student course evaluation to efficiently evaluate the quality of learning and teaching.

In Online instruction, the onus is on the student. They are able to learn What they want, When they want, Where they want, and **most importantly, will be able to assess what they have learnt**. As access to the Internet and World Wide Web has continued to grow, the institutions show interest to take up online tests at the student's convenience. Before giving into impulse of online testing, one has to consider its own pros and cons.

Online testing Disadvantages

- Online testing makes the student to feel more impersonal than the Pen and Paper test.
- It lacks creativity and may not suitable for some educational programs may simply not fit into an online setting (e.g., medical, physical education). Designers of online programs should take into consideration that online environment may have different effects on student learning in different courses.
- It is not as easy as simply uploading the Microsoft Word version of your test. Instead, instructors have to copy and paste each question's text and each individual answer's text into Blackboard, mark the correct answers, and customize feedback and setting options.
- Some students will not be accustomed to taking quizzes and tests online, and they may need some hand-holding early in the semester before they feel comfortable with the technology.

- Cheating on an online test is as simple as opening up another window and searching Google or asking a classmate for the correct answers. Furthermore, cheating on online multiple choice tests is near impossible for the instructor to prevent or catch.
- Though the technology that makes online tests possible is a great thing, it can also cause problems. If you do online testing, have a back-up plan for students who have technical difficulties and be ready to field some frantic emails from students who have poor internet connections or faulty computers.
- The majority of schools use paper-and-pencil evaluation systems. Need to train technophobic teachers Rosen and Weil (1990, cited in Rosen & Weil, 1995) have defined technophobia among teachers and students as an anxiety or negative views relating to current or future use of computer-related technology in the society.

Online testing Advantages

Despite the pitfalls listed above, there are some definite advantages to online testing:

- Testing in an online environment can be a lot more interactive than traditional paper and pen tests. Instructors can embed multimedia in test questions to provide more engaging assessments. For example, students may be asked to identify a particular area of an image by directly clicking on it instead of having to answer in written form.
- While it is hard to prevent cheating, Blackboard tests do offer many settings for instructors to randomize questions, impose test taking time limits, and restrict attempts. However, make sure to explain all the settings to students before they begin taking the test.
- Online evaluations appear to provide more effective methods of gathering constructive feedback than traditional paper-based methods and students can complete the surveys in a more efficient manner.
- The results of the online evaluation for each teacher can be stored on the computer as data for future reference.
- The majority of students prefer not using class time for evaluations, and they suggest that their comments are more thoughtful and purposeful when completed outside the class. (Anderson, Cain, & Bird, 2005:34)
- Students have more time to complete the online test at their own pace and time.
- Students are less affected by the influence of the teacher as the test is done outside.
- Online tests can be more accessible to students with disabilities who have assistive technologies built into their computers than hand written tests are.

Means to Enhance Online Testing

Given the advantages and disadvantages of online testing, some **practical tips for applying this tool**.

- Be sure to introduce online tests (and any other new learning technologies in general) to students early in the semester to reduce technical issues and build desired study habits.
- Another way to avoid the cheating issue is to design online tests to be open book assessments with a time limit.
- If students are struggling with a particular concept and a need for formative assessment occurs, apply online tests as a just in time assessment to help identify areas where extra practice is needed.

- Online tests can address student demands. Provide students with an online practice test a few days before a traditional exam. Just be sure the practice test is similar to the real thing.
- Online pre-tests are an asset for student self-assessment because students can receive immediate feedback. Students may take a pre-test at the beginning of the lesson to determine their current knowledge, then study the material, and take the test again to assess their achievement. A pre-test allows students to determine the course content that they will learn. It tells them where they are in the learning/knowledge process of that material. Perhaps they already feel comfortable with much of the material or set of learning objectives for that particular section of the course. Most importantly, a pre-test allows the instructor to have a form of measurement on which to base learning outcomes after the student has taken the post-test or the final examination. This approach is especially useful for competency-based learning models that focus on mastery of skills over time spent learning.
- School administrators should find solutions to help technophobic teachers to adapt to new technology more comfortably to help them in their teaching and administrative duties.

Conclusion:

This paper highlights the importance and benefits of online test and evaluation. Online evaluation will gain momentum at the secondary or postsecondary level to ease the administrative burden of teachers and staff and the workload of students in the near future. Online evaluation may become widespread at all levels if more and more school administrators realize the value of convenience of technology to help in course evaluation.

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E – Learning Resources

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INTRODUCTION

*“Where is the life? We have lost in living,
Where is the wisdom? We have lost in knowledge,
Where is the knowledge? We have in information”* said Eliot.

The educational system of today and tomorrow emerges largely with information and communication technology – computers, automations, multimedia and networks. Education in the 21st century is likely to gain a new dimension, a new name and a new function as a result of the revolution in information and communication technology. The process of learning, gets modified everyday adapting new techniques from various technological advancements. The internet is a vast resource. E – learning is an approach to facilitate and enhance learning using information and communication technologies. This paper aims at bringing out the different E –learning resources and its importance.

E-LEARNING

Electronic learning is a type of education where the medium of instruction is computer technology. E-learning is used interchangeably in a wide variety of contexts. It is commonly associated with the field of advanced learning technology (ALT), which deals with both the technologies and associated methodologies in learning using networked or multimedia technologies.

E LEARNING RESOURCES

Electronic learning resource is a huge resource – and it is growing at an ever increasing rate. It provides the user with access to a wealth of information on countless topics contributed by people throughout the world. There are millions of pages of information on the World Wide Web. By browsing the internet, much as you would browse the shelves of a library, we can access information on any topic not only in the form of text but also in the form of images, sounds, videos and animations. These documents are published by specialists, scientists, teachers and students.

Some of the tools used to locate the information we want are listed below:

DIRECTORIES

Directories are collections of resources organized into categories. Sometimes the directory will focus on one subject area, others may collect and organize resources in a number of areas.

Examples of directories are:

The Internet Public Library – <http://www.ipl.org>

The Open Directory – <http://dmoz.org/>

Yahooligans – <http://www.yahooligans.com>

SEARCH ENGINES

The internet is not like a library, with its shelves of well-organised books. In order to find the resources we need to use a search engine.

Examples of search engines are:

Google – www.google.com

Hot Bot – www.hotbot.com

MetaCrawler – www.go2net.com

ASK THE EXPERTS

The internet gives us experts in any field we might be interested in. from aeronautics to xylophones, we can be sure that someone out there knows all about it and is willing to share their knowledge with us. There are lots of places to go to find experts. We might join an e-mail discussion list, participate in a newsgroup or access experts through the internet.

NET SNIPPETS

It is a web research tool that provides a suite of personal and collaborative solutions for managing academic online research. Net snippets is also available free of cost.

E_CONTENT APPROACH

E-content is a product of E-Learning. E-content is one of the recent techniques in the educational technology. In this E-content way of instruction is learner centric. E-content as products, which are electronically recorded e.g. websites, CD/DVD-ROM.

In education 'E-content' way of instruction plays a major role. It is a web based instruction developed for individual's auto learning on any subject required by the learner. In this content is delivered via the internet, audio or video tape, satellite TV and CD-ROMs.

Some of the E-learning resources are listed below:

ONLINE CONFERENCING

Online conferencing refers to the use of the internet to confer with a number of people simultaneously. This facility can be used for person-to-person interaction, or group communication. Online conferencing features like posting messages, sharing files or instant messaging in real-time popularly known as 'chat' – help enhance and promote an interactive learning environment.

VIDEO CONFERENCING

In this two or more people at different locations can see and hear each other at the same time. Video conferencing offers possibilities for schools, colleges and libraries. This can be used for a variety of purposes, including formal instruction, connection with guest speakers and experts, multi-school project collaboration, professional activities and community events.

Once connected, the other person can be seen on a computer screen and may be able to transfer files.

E-CONFERENCING

An e-conference is a moderated discussion conducted via internet using e-mail and sometimes a website. An informal e-conference among peers in different cities can be done on the 'messenger' or 'chat' facility. A moderated discussion is different from other electronic discussion forums as it builds in a mechanism to ensure that participants adhere to the agenda and observe the time-line.

INTERNET FORUMS

Internet forums are also referred as web forums, message boards, discussion boards, discussion forums, discussion groups, bulletin boards, or simply forums. Most internet forums are woven around a subject or a theme. These forums perform the functions of providing asynchronous communication options to users.

NEWSGROUPS

People with an interest in providing and receiving information about a single subject are encouraged to post to the newsgroup based on a topic. There are newsgroups for almost any topic.

BLOG

A blog is a web page that serves as a publicly accessible personal journal for an individual. Typically updated blogs reflect the personality of the author. Authoring a blog or adding an article to an existing blog is called blogging. Blogs have reshaped the web and enabled millions of people to have a voice and connect with others. Students can use blogs to record what they learn, and teachers can use blogs to record what they teach. It serves as an important e - learning resource.

WIKI

A wiki is a type of website that allows users to easily add, remove, or otherwise edit all content, very quickly and easily, sometimes without the need for registration. Wiki is interpreted as “What I Know Is”, which describes the knowledge contribution, storage and exchange function.

DISCUSSION BOARD

Discussion boards are a special kind of graphic aid for teaching students to look at both sides of an issue before drawing a conclusion. It is an open forum where we can share experiences, discuss feelings, seek advice etc. This provides an atmosphere where students may feel more comfortable responding than they do in a face-to-face class.

CHAT ROOMS

A chat room is a place on the internet where people with similar interests can meet and communicate together by typing messages on their computer. Students can use chat rooms to develop collaborate projects, interact with peers, experts etc. Young people today visit social networking sites daily as part of their regular routine. This platform could easily be integrated into classroom learning.

E-JOURNAL

E-journal is an electronic version of a journal that is found and read on the web. An electronic version of a printed journal is provided and made easily accessible than the printed copy. In an e-journal, provision of Hyper linking allows further improvements. Apart from links between the text and references or footnotes, hyper linking enables links to other documents e.g. other articles or reports.

Some of the directories of e-journal are:

www.e-journal.org/

<http://www.sciencedirect.com/>

E-TUTORING

e-tutoring can be defined as teaching, support, management and assessment of students on programmes of study that involves a significant use of online technologies (Tech Learn, 2000). Its impact on educational activities is immense. They have remarkable educational advantages in enriching both formal and non-formal educational processes.

EDUSAT

EDUSAT was launched on 20-09-2004 by the Indian Space Research Organisation. EDUSAT is the first Indian satellite built exclusively to serve the educational sector. It is mainly intended to meet the demand for an interactive satellite-based education system for the country.

INTERNET RADIO (e-Radio)

Internet radio is a broadcasting service transmitted via the Internet. Not every internet radio station has a corresponding traditional radio station. Broadcasting on the internet is usually referred to as webcasting since it is not transmitted broadly over the World Wide Web. E-radio suggests a streaming media that presents listeners with a continuous stream of audio to which they have no control much like traditional broadcast media.

INFLIBNET

Information and library network is an autonomous Inter University Centre of UGC involved in creating infrastructure for sharing of library and information researches and services among academic and research institutions. INFLIBNET works collaboratively with Indian university libraries to shape the future of academic libraries in evolving information environment.

DIGITAL LIBRARY

Digital libraries are emerging as an important area of E-learning. A digital library is a collection of documents in organized electronic form, available on the internet or on CD-ROM disks. Depending on the specific library, a user may be able to access magazine articles, books, papers, images, sound files and videos.

These are some of the E-learning resources.

BENEFITS OF E-LEARNING RESOURCES.

- Learning is self-paced and gives students a chance to speed up or slow down as necessary.
- Learning is self-directed, allowing students to choose content and tools appropriate to their differing interests, needs and skill levels.
- Designed around the learners.
- Geographical barriers are eliminated.
- On demand learning can happen precisely when needed.
- Fosters greater student interaction and collaboration.
- Enhances computer and internet skills.
- Round the clock accessibility makes scheduling easy for the students.

CONCLUSION

To conclude, these days students enter the computer age and try to understand what they should do with computers in their learning. Implementing such innovative methods in learning will improve the achievement level of students, raise their motivation levels, effective learning of concepts and provide joyful learning experience, which is the need of the hour.

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**கற்றல் கற்பித்தல் செயல்பாடுகள் சரியான திசையில்
செல்வதை உறுதி செய்தல்**

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பொருளடக்கம்

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முன்னுரை

கல்வி என்பதற்கு பொதுவாக கற்றல் என்பதுடன் இணைத்துப்பொருள் கூறப்படுகிறது. பிறப்பு முதல் மனிதனிடம் இயற்கையாக அமைந்து காணப்படாமல் பின்னர் பெறும் அனுபவங்களும் அவற்றின் விளைவுகளும் 'கற்றல்' என்பதனுடன் அடங்கும்.

அறிவுடையார் எல்லாம் உடையவர். அறிவின் அடிப்படை கல்வியாகும். ஒருவருக்குக் கல்வியே கேடற்ற செல்வமாகும். ஆண், பெண் ஆகிய அனைவருக்கும் வேறுபாடு இன்றியமையாத ஒன்றாக திகழ்வது யாதெனின் கல்வியே ஆகும். எந்தவொரு சமூகத்தினரும் இக்கல்வியை கற்பதிலிருந்து விலகிச் செல்வது இன்றைய உலகில் மிகவும் அரிதாகக் காணப்படுகிறது. ஏனெனில் கல்வியின் சிறப்பை அனைத்து சமூகங்களும் புரிந்துள்ளன. இதனால் தான் இன்று கல்வியானது மனிதனின் அத்தியாவசிய தேவையாக இருக்கிறது.

‘கேடில் விழுச்செல்வம் கல்வி ஒருவற்கு

மாடல்ல மற்றையவை’

என்ற வள்ளுவரின் திருக்குறளுக்கு கேற்ப எல்லா, செல்வங்களைக் காட்டிலும் ஒன்று உலகில் உண்டென்றால் அது கல்விச் செல்வமேயாகும். அக்கல்விச் செல்வத்தை ஆசிரியர் சமுதாயம் மாணவச் செல்வங்களுக்கு கற்பித்தல் செயல்பாடுகள் மூலமாக வற்றாத நீருற்றாய்நாளும் வழங்கி வருகிறது.

‘எண்ணும் எழுத்தும’ கண் என தகும்

என்றார் ஒளவையார்.

‘கண்ணுடையார் என்பவர் கற்றோர்’

என்றார் வான்புகழ் வள்ளுவர்

கல்வியறிவு படைத்த ஒருவனை வேந்தனும் விரும்புவான் என்கிறது

வெற்றி வேற்கை.

கல்வி விளக்கம் :

‘கல்வி’ என்பதன் வேர்ச்சொல் ‘கல்’ என்பதாகும். ‘கல்’ என்பதற்கு கல்லுதல், தோண்டுதல் துருவுதல் என்று பொருள்படும்.

கல்வி – கற்பித்தல் - கற்றல்

கல்வி – எடுத்தல் - வளர்த்தல்

‘நுனரஉயவழை’ என்ற சொல் ‘நுனரஉயவந்’ என்ற இலத்தின் மொழிச்சொல்லிலிருந்து பெறப்பட்டது. குநரஉயசந் என்பதன் பொருள் வெளிக்கொணர்தல் என்பதாகும்.

‘நுனரஉயவழை’ என்ற சொல் பயிற்றுவித்தல், பயிற்சியளித்தல் ஆகிய பொருள்களைத் தருகிறது.

கல்வியில் கற்பித்தல் என்பது ஆசிரியர் தன் உன் ஒளியை, தான் கற்பிக்கும் மாணவனின் உள்ளூலியாக மாற்றுவதாகும்’ என்கிறார் கவிஞர்.

இந்திய அறிஞர்களின் கல்வி பற்றிய கருத்துக்கள்

அ) இரவீந்திரநாத் தாகூர்

1) உறவுகளை வளர்க்கவும், இயற்கையுடனும், சூழ்நிலைகளுடனும்

இணைந்து செல்வதற்கு செய்வது தான் கல்வியின் பணி’ என்றும்,

ஆ) சுவாமி விவேகானந்தர்

1) இயற்கையாகவே மனிதன் தனக்குள்ளே புதைந்துள்ள

தெய்வீகமாக பூரணத் தத்துவத்தை வெளிக்கொணர்வதே கல்வி’ என்றும்,

இ) காந்தியடிகள்

கல்வி என்பது குழந்தையின் உடல், உள்ளம், ஆன்மா ஆகிய

அதன் ஆளுமைக்கூறுகளின் சிறந்த பண்புகளை வெளிக்கொணர்தல்

(அன்பு, அறிவு, உழைப்பு, ஆற்றல் போன்றவற்றை அளிப்பதாக கல்வி

அமைதல் வேண்டும் என்கிறார்.

ஈ) அரவிந்தர்

வளரும் ஆன்மாவிற்கு தன்னுள் உள்ளவற்றை வெளிக்கொணர

உதவுவதே கல்வி எனக் கல்விக்கு புதிய வரையறை நல்குகிறார்.

மேற்கத்திய கல்வியாளர்கள்

ஒருவனை முழுமையான மனிதாக மாற்றுவது கல்வி என்றும்,

3. கல்வி என்பது இயல்பிலேயே மனிதனிடம் பொதிந்து கிடக்கிற

நற்பண்புகளை வெளிக்கொணர்தல் என்று கூறுகிறார்.

அ) பிளாட்டோ

கல்வி என்பது மனிதனின் உடல், உயிர், அறிவு இவற்றை

மேம்படச் செய்கிறது.

ஆ) அரிஸ்ட்டாட்டில்

கல்வி மனிதனுடைய உள்ளுணர்ச்சியையும், அறிவுக்கூர்மையும் விளக்கமுறச் செய்து

தன் அழகு, நலம் நன்மை வாய்மை முதலியவற்றைச் சிந்திக்கத் தூண்டுகிறது.

(கல்வி உறுதியான உடலிலே உறுதியான உள்ளத்தை உருவாக்குவது) என்று

அரிஸ்ட்டாட்டில் கூறியுள்ளார்.

இ) நன்

முழு மனிதனை உருவாக்குவது என்று கோமினியசும், பண்புகளை

உருவாக்குவது என்று டே ஆனந்தும், உண்மையான அறிவை வளர்ப்பது

என்று ஏமராசும்

இ) மனிதனின் தனித்தன்மைகளை முழுமையாக வளர்ப்பது என்றும் நன் என்பாரும் கூறியுள்ளார்.

ஈ) பிரோபெல்

கல்வி என்பது மூடப்பட்டிருந்த முத்துக்களைத் திறப்பது போன்றதாகும். மனித வளர்ச்சி மேம்பாட்டிற்கு கல்வி வளர்ச்சியே முதல் காரணி 'கல்வி வளர்ச்சி அறிவு வளர்ச்சி' என்கிறார்.

உ) மாண்டிசேரி

கல்வி என்பது குழந்தையின் வளர்ச்சியை அடிப்படையாக கொண்ட ஒரு சுதந்திரமான செயல்முறையாகும். இவரது கல்வி முறை புலன் அனுபவக்கல்வி என்று அழைக்கப்படுகிறது.

தேசியக் கல்விக் கொள்கை

சுயவேலை வாய்ப்பு அறிவியல் தொழில்நுட்ப வளர்ச்சி

ஆளுமைத்திறன் ஆகியவற்றை இன்றைய இளைஞர்கள் பெற்றிட கல்வி

உதவ வேண்டும் என்று வலியுறுத்துகிறது.

கல்வியின் நான்கு தூண்கள்

1. அறிவைப் பெறுவதற்காக கற்றல்

2. செயல்புரியக் கற்றல்

3. கூட்டாக வாழ்வதற்குக் கற்றல்

4. சுயம் இழக்காமல் இருப்பதற்குக் கற்றல்

வருங்காலக் கல்வியின் அடிப்படையாகவும் இதனைக் கருதலாம்.

கல்வியினைக் கற்றுக் கொடுப்பதனால் 7சு மாணவர்களிடம்

ஏற்படுத்த முடியும்.

1. படித்தல் சுநயனபெ

2. எழுதுதல் றுசவைபெ

3. கணக்குப்போடல் யுசவாஅநவடை

4. உரிமைகள் சுபாவள

5. கடமைகள் சுநளிழளெடைவைநை

6. உறவு சுநடயவழைளொனி

7. புதியன படைத்தல் சுநஉசுநயவழை

பழமையான நோக்கத்தையும் புதிய நோக்கத்தையும் சேர்த்து ஏழு என்று

கூறுவார்கள்.

கல்வியின் சிறப்புத் தேவைகள்

தெளிவாக நூல்களை கற்றல்

'கற்க கசடற கற்பவை கற்றபின்

நிற்க அதற்குத்தக என்று குறளாசிரியர் கூறுவர்.

'எழுதரிது முன்னம் எழுதிய பின்னர்

பழுதறவா சிப்பரிது பண்பாய் - முழுது மதைக்

கற்பரிது நற்பனைக் காண்பரிது கண்டக்கால்

நிற்பரிது தானந் நிலை'

ஒரு நூலினை ஏட்டிலே பெயர்த்து எழுதுதல் அரிதான செயலாகும். அந்த அரிய செயலை செய்தாலும், அப்படி எழுதியுள்ளதனைக் குற்றமின்றிப் படிப்பதற்கு கல்வி தேவை. பிறவியின் தன்மையினை உள்ளபடியே உணர்ந்து வாழ்வதற்கான நற்பயனைக் கண்டுணர்வதற்கு கல்வி அவசியம் 'அங்ஙனம் கற்றதன் பயனை நற்பயனைக் காணுகின்ற தெளிவினைப் பெற்றவர்கள் மிகவும் சிறந்தவர்கள். அவர்களின் நிலையில் தனது நிலைபெறும் உறுதித்தன்மையினையும் பெறுதல் வேண்டும்.

இங்ஙனம் நிலையின்றி பிறழாது அவர் உறுதியாக நிற்பாரானால், அதுவே

கல்வியினை அடைந்ததாகும்.

வளர்ச்சி – உடல் (ஆள்) வளர்ச்சி + அறிவு (உள்ள) வளர்ச்சி

ஆளுமை = உடல்வளர்ச்சி + மன வளர்ச்சி

தனிமனித நோக்கம்

1. உடல் வளர்ச்சி
2. அறிவு வளர்ச்சி
3. மொழி வளர்ச்சி
4. அறமொழி வளர்ச்சி
5. சமூக இயல்பு வளர்ச்சி
6. ஆன்மீக வளர்ச்சி
7. மனஎழுச்சி வளர்ச்சி
8. பண்பாட்டு வளர்ச்சி

மாணாக்கர்

குழந்தைகளிடம் உள்ளமைந்து கிடக்கும் பல்வேறு ஆற்றல்களையும் திறன்களையும் வெளிக்கொணர கல்வித்தேவை. கற்றல் செயல்பாடுகள் மாணாக்கர்களது நிலையை உயர்த்த உதவுகிறது.

மாணாக்கர்களது வளர்ச்சியின் தன்மையையும் அவ்வளர்ச்சியின் விளைவாக அவர்கள் பெறும் பயன்களும் கல்வியின்றி எவ்வாறு இயற்கையாக காணப்படுமோ அந்நிலையினின்றும் கல்வி பெறுவதன் விளைவாக மாற்றம் பெற்றும், உயர்நிலைப்படும் காணப்பட உதவுகிறது.

குழந்தையின் ஆளுமை வளர்ச்சியே கற்றலின் நிலையாய் நோக்கம் படைக்கும் திறனையும், சிந்தனைத் திறனையும் வளர்த்து எதிர்காலத்தோடு ஈடுகொடுக்கும் எதிர்காலச் சமுதாயத்தை உருவாக்க கல்வி உதவுகிறது. ஆழ்ந்த அறிவுக்கு வழிவகுக்கிறது. சமூகத்தின் சிறப்பான உறுப்பினர் செயல்பட நலமான வாழ்க்கைக்குத் தேவையான பொதுத்திறன்களைப் பெற்றிட கல்வி உதவுகிறது. மாணவர்கள் தக்க குழந்தையிலே நல்லமுறையில் உடல், உரமும் மன வளமும் பெற்று சிறந்த குடிமக்களாகத் திகழ கல்வித்தேவை. சமூகத்தின் நற்குடிமக்களாகப் பயிற்றுவித்தல் கல்வியின் பணியாகும்.

இச்செயல்பாடுகள் முழுமை பெறுகின்ற போது தான் கற்றல் கற்பித்தல் செயல்பாடுகள் சரியான திசையில் செல்வதை உறுதி செய்யமுடியும். தனிமனிதன் வாழ்விற்கு உதவுதல் கல்வி தனிமனிதனை நல்ல குடிமகனாக மாற்ற உதவுகிறது. கல்வி ஒரு மனிதனை சமுதாயத்திற்குப் பயனள்ள வகையிலும், தனது சமுதாயக் கடமைகளை ஆர்வமுடன் நிறைவேற்றக்கூடியவனாகவும் உருவாக்க உதவுகிறது. தனிமனிதனுக்கு உறுதியான ஆரோக்கியமான உடலையும் அவனுடைய மனித பண்பினை வளர்ப்பதற்கு உதவும் வகையில் கல்வி அமைதல் அவசியம். ஒரு தனிமனிதனுடைய உடல், அறிவு, மொழி, அறநெறி, சமூக இயல்பு, ஆன்மீகம், மனஎழுச்சி, பண்பாட்டு முதலியவை வளர்ச்சி பெறுவதற்கு கல்வித்தேவை. வருவாய் உள்ள தொழிலை நடத்தவும் ஓய்வு நேரத்தை பயனள்ள வகையில் கழிக்கவும் கல்வி உதவுகின்றது. ஒவ்வொரு தனிமனிதனும் பொருளாதார நிலையில் மற்றவர்களுக்குச் சுமையாய் இராமல் தன்னைத்தானே காப்பாற்றிக்கொள்ளும் திறன் பெற உதவுகிறது.

சமூக நோக்கம்

சமுதாய நலன் சமுதாயத்தின் குடியரிமைத்தன்மை, ஆகியவை மனிதன் சமூக பண்புகளோடு இணைந்து வாழ உதவுதல் வேண்டும். தன்னைச்சுற்றியுள்ள சமூகத்தை புரிந்து கொள்ளும் அளவிற்கு அறிவும் திறனும் பெற்றிருக்க கல்வி தேவையாகிறது. சமூகத்திலுள்ள சகக் குடிமக்களோடு வழங்குவதில் நீதி முறைகளை கடைபிடிக்க கல்வி ஒரு தனிமனிதனுக்கு தேவை.

அந்தக் காலத்தில் இருந்த கல்வித்திட்டம் நாட்டின் தேவைகளை நிறைவேற்றுவதாக இல்லை. எனவே தொடக்கக்கல்வி குறைந்தபட்சம் ஏழு வயது வரை விரிவுபடுத்தப்பட்டது. அதில் பொது அறிவு, தாய்மொழிக்கல்வி, கைத்தொழில் ஆகியவற்றைக் கற்பித்தல் வேண்டும். ஏட்டுப்படிப்போடு உடலுழைப்பும் தேவை என்றும்

இந்திய மாணவர்களை சிறந்த குடிமக்களாக உருவாக்குவதற்கும் இந்திய பண்பாட்டை அவர்களிடம் ஊட்டுவதற்கும் கல்வித்தேவை.

சமுதாயப் மதிப்பு பெறுதல்

‘கண்ணுடையர் என்பவர் கற்றோர்’

கற்றோர்க்குச் சென்ற இடமெல்லாம் சிறப்பு.

கற்றவர் எங்குச் சென்றாலும் மதிக்கப்படுவர், சமுதாய மதிப்பு கல்வியில் மட்டுமே உலகெங்கும் இருந்து வருகிறது. ஒரு நாடு மட்டுமல்லாமல் எந்த நாட்டிற்கு சென்றாலும் கற்றவர்க்கு மதிப்பு உண்டு. கல்வி கற்றவன் எந்த இடத்திற்கு சென்றாலும் அவன் பிற சமூகத்தால் மதிக்கப்படுவதற்கு காரணம் அவன் கற்ற கல்வியே கற்றவனுக்கு நன்றாகும் ஊருமேயல்லாமல் எந்த நாடும், ஊரும் தன்னுடைய ஊராகும். ஒருவன் தான் மரணிக்கும் நாள் வரை கல்வி கற்க வேண்டும் கற்காமல் இருந்தால் சிரமமானதாகிவிடும். இதனையே திருவள்ளுவர் மிகவும் அழகாக வருணித்துள்ளார்.

‘யாதானும் நாடாமல் ஊராமல் என்னொருவன்

சாத்துணையும் கல்லாதவாறு’ என்ற குறளின் மூலம் தெளிவாக

அறியலாம் கல்வி கற்ற அறிவுடையவர்கள் தேவர்க்குச் சமமாக மதிக்கப்படுகின்றார்கள். படித்தவர் பிறருக்குத் தாம் படித்ததை எடுத்துக் கூறுவதே அறம் ஆகும்.

செல்வம் பெறுதல்

கல்வியைப் போன்ற செல்வம் எதுவுமில்லை என்பதை

‘கேடில் விழுச்செல்வம் கல்வி ஒருவற்கு

மடால்ல மற்றையவை’

என்கிறார் வள்ளுவர். நாடு விட்டு நாடு சென்று கற்கப்போகிறார்கள். செல்வம் ஈட்டிச் செல்கின்றனர். மேலை நாடுகளுக்கு இன்றைய இளைஞர்கள் சென்று வருவதற்கு இங்கு கற்கும் கல்வி உறுதுணையாக இருக்கின்றது.

‘ஒருமைக்கண் தான் கற்ற கல்வி ஒருவற்கு

எழுமையும் ஏமாபுடைத்து

என்றும் திருக்குறளில் வள்ளுவர் அழகாகக் கூறியுள்ளார். கல்வி தொழிலுக்கு வழிகாட்டுகிறது. ஒருவனுக்கு பெருமையும், புகழையும் தேடித்தரும் செல்வம் கல்விச் செல்வமேயன்றி வேறு இல்லை.

அறியாமை அகற்றுதல்

‘இம்மை பயக்குமால் ஈயக் குறைவின்றால்

தம்மை விளக்குமால் தாமுளராக் கேடின்றால்

எம்மை உலகத்தும் யாம்கானோம் கல்வி போல்

மம்மர் அறுக்கும் மருந்து’

கல்வி இப்பிறவியின் பயனை அளிக்கும். மற்றவர்களுக்கு அதனை வழங்குவதால் அது குறைவதில்லை. கற்றவர்களை அறிவால் விளங்கச் செய்யும். தாம் இருக்கும் வரை அதுவும் அழியாமல் இருக்கிறது. எந்த உலகத்திலும் கல்வியைப் போல அறியாமையை நீங்கும் மருந்தை நாம் கண்டதில்லை. கல்விதான் வாழ்க்கையில் ஏற்படும் எல்லாத் துன்பங்களுக்கும் காரணமான அறியாமை நோயை அழிக்கிற மாமருந்தாக இருக்கிறது என்றால் மிகையாகாது.

ஒழுக்கத்தை வளர்த்தல்

‘ஒழுக்கம் விழுப்பம் தரலான் ஒழுக்கம்

உயிரினும் ஒம்பப்படும்’ என்ற குறியில் ஒழுக்கம் எவ்வளவு உயர்ந்தது என்பதை அழகாக வள்ளுவர் எடுத்துரைக்கிறார். இத்தகைய உயர்ந்த ஒழுக்கத்தை ஒருவன் பெற்றிட கல்வி அவனுக்கு உதவி செய்கிறது. நாம் நல்லவராக இருக்கிறோம் என உள்ளம் அறிய உண்மையாய் உணரும் ஒழுக்கத்தை அளிப்பதால் மக்களுக்கு

கல்வியின் அழகே சிறந்த அழகாகும். நல்ல ஒழுக்கத்தைத்தரும் கல்வியே மக்களுக்கு சிறந்த அழகாகும்.

வாழ்க்கைப் பயணத்திற்கு உதவுதல்

‘சாரம் போக்கி உலகு கொண்டார் இல்லையே இல்லை

மரம் போக்கிக் கூலி கொண்டார்’

என்ற பழமொழி பயணம் செய்வதற்குப் படகின் கூலியை முன்னதாகக் கொடுத்து ஆற்றைக் கடப்பதற்கு வழிவகை செய்து கொண்டதற்கொப்ப தன் எதிர்காலத்தைச் செம்மையாகக் கடப்பதற்கு இளவயதில்,

‘கற்கை நன்றே கற்கை நன்றே

பிச்சை புகிலும் கற்கை நன்றே’

என்ற முதுமொழிக்கேற்ப பிறரிடம் உதவி பெற்று கற்பது சிறந்தது.

இளவயதில் கல்வியைக் கற்றுத்தேர்வது, என்றும் வாழ்க்கை பயணத்தைக் கடக்க நலம் பயக்கும் என்பதில் ஐயமில்லை. பிறர் கைகளை எதிர்பார்த்து வாழாமல் தன்சொந்த கைகளை நம்பி வாழ்வதற்கு வாழ்க்கையில் கல்வி அவசியம் தேவை. ஒரு பெண் கல்வி கற்றால் அவள் குடும்பமே கல்வி கற்பதற்கு உதவுகிறாள். குடும்பத்தை வறுமையிலிருந்து செல்வ செழிப்பிற்கு கொண்டு வருவதற்கு கல்வி உதவுகிறது. தான் மட்டும் வாழாமல் பிறரையும் வாழ வைப்பதற்கு உதவுவது கல்வி.

வாழ்க்கைத் திறன்கள்

ஒருவரின் உடல், உள்ளம், உணர்வு ஆகியவற்றை நலமாக வைத்துக் கொள்ள உதவும் திறன்களே வாழ்க்கைத் திறன்கள் ஆகும். உலக நலநிறுவனம் வாழ்க்கைத் திறன்கள் பற்றிப் பின்வருமாறு விளக்குகிறது. ‘அன்றாட வாழ்க்கை நிகழ்வுகளையும், தேவைகளையும் ஒவ்வொருவரும் திறமையாக எதிர்கொள்வதற்கு நேர்மையான சிந்தனைகளையும், நடத்தைகளையும் பெற்றிருத்தல் இன்றியமையாதது. அதன் பொருளாவது குழந்தைகள் சமுதாய உளவியல் திறன்களையும் உள்ளார்ந்த திறன்களையும் வளர்த்துக் கொள்ளுதல் ஆகும்.

வாழ்க்கைத்திறன்களை வளர்த்தல்

அ) தன்னை அறிதல்

தன்னம்பிக்கை வளர்த்தல், மரியாதை தருதல், பிறரை மதித்தல், தன் திறமை, குறைகளை அறிந்திருத்தல், சூழலுக்கேற்பவும் நேர்மையாகவும் முடிவெடுத்தல், சுய முடிவு எடுத்தல் மற்றும் தெரிவித்தல் போன்ற பண்பு நலன்களை வெளிப்படுத்தவும், அறிந்து கொள்ளவும் கல்வி தேவைப்படுகிறது.

ஆ) துணிந்துரைத்தல் / மறுத்தல் திறன்

தேவையற்ற செயல்களில் தன்னைக் கட்டுப்படுத்தும் ஆற்றல், பிறரிடத்தில் தன்னை நிலைநாட்டலி, தீச்செயல் தீயநோக்குடன் தொடுதலை எதிர்த்தல், ஒத்தவயதுடையவர்களுடன் உறுதியாகவும், இணக்கத்துடனும் இருத்தல், புதியவர்களுடன் எச்சரிக்கையுடன் இருத்தல் காமறிந்த தேவைக்கு மட்டும் உதவி பெறுவதற்கும் கல்வி மிகவும் உறுதுணையாக அமைகிறது.

இ) பகுத்தறியும் திறன்

குறிக்கோளும், திறமையும் வெளிப்படும் காரணகாரிய தொடர்புடைய சிந்தனை. இடர்பாண சூழலிலும் வளமார்ந்த சிந்தனை கட்டுப்பாடுடன் கூடிய செயல்பாடு, தோல்வியை வெற்றிப்படியாக மாற்றும். சிந்தனைத் திறன்களை ஒரு மனிதன் பெற்றுக் கொள்வதற்கும் அவதூறு சிந்தனைத்திறன் வளர்ச்சி அடையவும் கல்வி பயன்படுகிறது.

ஈ) செய்தி வெளிப்பாட்டுத்திறன்

குறிக்கோளை நோக்கிய தெளிவு பெறுவதற்கும், உற்று நோக்குவதற்கும் குற்றம் பாராது கருத்துக்களைப் பாராது கருத்துக்களைப் பகிர்ந்து கொள்ளுதல், மீள்

கருத்துக்களை ஏற்றல், வற்புறுத்தாத மனஉறுதி, தேவையான உரிய உடலசைவுகளை பயன்படுத்துவதற்கு கல்வி கற்ற ஒருவரால் தான் புரிந்துகொள்ள முடியும்.

உ) குழுப்பணி

குழுவில் முன்னின்று பணியாற்றும் தன்மை, பிறர் கருத்துக்கு மதிப்பளித்தல், பொறுப்புடன் செயல்படும் தன்மை, குழுவின் கூறும் மீள்கருத்துக்களையும், திறனாய்வுக் கருத்துக்களையும் நேர்மறையாக எடுத்துக் கொள்ளுதல் போன்ற நற்பண்புகளை பெற்றுக் கொள்வதற்கு கல்வி அவசியமாகிறது.

மனப்பான்மைகளும் மதிப்புகளும்

தேசிய மற்றும் மாநில அரசு சார்பான சின்னங்களுக்கு மரியாதை செலுத்துதல் தேசிய மற்றும் மாநில அரசு சார்பான சின்னங்களை அறிதல், அதன் பொருளையும், தனிச்சிறப்பையும் புரிந்து கொள்ளுதல், விடுதலை திருநாள், குடியரசு திருநாள், கொடியேற்றங்களில் கலந்து கொள்ளுதல், ஒழுங்குடனும், மகிழ்ச்சியுடனும் தமிழ்த்தாய் வாழ்த்தையும், நாட்டுப்பண்பையும் பாடுதல், இந்தியன் என்னும் உணர்வு வெளிப்படுமாறு நடந்து கொள்ளுதல் இவற்றை அறிந்து கொள்ளவும், அதன்படி நடக்க கல்வி அவசியம் என்றால் மிகையாகாது.

பாராட்டுத்தக்க பண்புடைமை

எப்பொழுதும் பொருத்தமான பண்புகளையே வெளிப்படுத்துதல், சொல்லிலும், செயலிலும் அனைவருக்கும் மதிப்பளித்தல், நண்பர்களுக்கு உதவுபவராகவும் அவர்களின் மனத்திற்கினியவராகவும் இருத்தல், சமூக நன்னடத்தையினை வகுப்பிலும், வெளியிடங்களிலும் வெளிப்படுத்துதல், சினங்கொள்ளும் நிலையிலும் பண்பு நிலையிலிருந்து தவறாமல் இருத்தல் போன்ற பண்புகளை வளர்க்க கல்வி தேவையாகிறது.

பள்ளி மற்றும் சமூகத்தில் உள்ள பொதுச் சொத்துக்களைப் பாதுகாத்தல்

பள்ளியின் தளவாடல் பொருட்களையும் அவர்களையும் சேதப்படுத்தாமல் இருத்தல், மனம்போன போக்கில் வன்முறையில் ஈடுபடுவதும் அதனால் பள்ளியின் சொத்துக்களைப் பாழ்படுத்தாமல் இருத்தல், மின்சாரச் சாதனங்களைத் தேவைப்படும் பொழுது மட்டும் பயன்படுத்துதல், பிறரால் ஏற்படும் கலைப்பண்பாட்டுச் சீரழிவுகளைத் தடுத்தல், பொதுச் சொத்துக்களைப் பாதுகாப்பதில் பங்கேற்றல் இச்செயல்களை கல்வி கற்ற ஒருவரால் சிறப்பாக கைக்கொள்ள முடியும்.

பிற உயிர்களிடத்தில் அன்பு காட்டுதல்

மகிழ்ச்சியுடனும், நேர்மறைச்சிந்தனையுடனும் இருத்தல், அடுத்தவருக்கு முன்வந்து தாமாக விட்டுக்கொடுத்து உதவுதல், தாவரங்களையும், மரங்களையும் பாதுகாத்து வளர்க்க முன்வருதல், எம்முறையில் விலங்குகளை உயிர்களைத் துன்புறுத்தாத பண்புடன் இருத்தல், துன்புறுத்தும் முன் மற்ற உயிர்களின் நிலையில் இருந்து பார்த்தல் என்ற பண்புகளை பெற கல்வி உதவுகிறது எனலாம்.

சாலை விதிகள் மற்றும் பாதுகாப்பைக் கடைபிடித்தல்

சாலை விதிகளை விழிப்புடன் பின்பற்றுதல், விளையாட்டுத் திடலில் பாதுகாப்பு விதிகளைக் கடைபிடித்தல், மின் பொருள்கள் மின்மாற்றிகளில் கை வைக்காதிருத்தல், சமயலறைச் சாதனங்களைப் பாதுகாப்புடன் கையாளுதல், நீர்நிலைகளில் போதிய எச்சரிக்கையுடன் இருத்தல் போன்ற செயல்பாடுகளில் கவனமுடன் இருப்பதற்கு கல்வி உதவி செய்கிறது.

சுற்றுச்சூழல் மதிப்பு

பயன்பாட்டைக் குறைத்தல், மறுபயன்பாடு மற்றும் மறுசுழற்சி பற்றி அறிந்திருத்தல், உயிர்களின் பலதரப்பட்ட வகைகளையும், அவற்றைப் புவியில் பாதுகாக்க வேண்டிய

அவசியத்தையும் புரிந்து நடந்து கொள்ளுதல், சுற்றுப்புற மாசினால் விளையும் தீமைகளை அறிந்திருத்தல், சுற்றுப்புறத்தைப் பாதுகாக்க பள்ளி மேற்கொள்ளும் நடவடிக்கைகளில் முழுமையாகப் பங்கேற்றல், சுற்றுப்புறச் சூழல் சார் செய்திகளால் பரப்பத் தேவையான நடவடிக்கைகளை மேற்கொள்வதற்கும் கல்வி மிகவும் இன்றியமையாததாகிறது.

மனப்பான்மைகளும், மதிப்புகளும்
மனப்பான்மைகளும், மதிப்புகளும் ஒரு குழந்தை தான் விரும்பும் வாழ்க்கையின் தரத்தை நிருணயம் செய்யும் அளவீடுகளாகும். சில மதிப்புகள் உள்ளார்ந்தவை. அவை ஓர் ஆசிரியரால் தூண்டிவிடப்படலாம். பிற மதிப்புகள் மூன்றுதாரணங்களைக் காட்டியே வளர்க்கப்படுகின்றன. முழுமையான கல்வி சமூகக் கொள்கைகளான இணக்கமான ஒப்புரவு, சமுதாயநிலை, மரியாதை மற்றும் சகிப்புத்தன்மை போன்ற பண்புகள் வளர சாத்தியமாகிறது. நேர்மையாக நடந்து கொள்ளுதல், ஒழுக்கமாக இருத்தல் மற்றும் சமூகக்கேடுகளை எதிர்க்கும் பண்புகள் போன்றவை உள்ளார்ந்தவை ஆகும்.

‘கள்வனால் கவர முடியாத
இளமையில் கற்ற கல்வி
எழுமையும் பெருமை தருமே
முழுமையும் பெறுவீர் அதனை!
வெள்ளத்தால் அடித்துச் செல்லாத
விழுமிய செல்வம் கல்வி
வேண்டிய பொருளை ஈந்தும்
வேண்டுவீர் அதனை இன்றே!
மலையென் பெற்ற செல்வம்
அலையென கரைந்த போதும்
நல்வழி காட்டும் கல்வி
நன்மை என்றும் தருமே!
கொடையெனும் உயர்ந்த பண்பால்
கொடுத்திடும் கல்வி மட்டுமே
பெறுபவர் அன்றி கொடுப்பார்
இருவர்க்கும் இன்பம் பயக்கும்!
எண்ணுடன் எழுத்தும் வாழ்வின்
கண்களாய் வண்ணம் கூட்டும்
துன்பத்தைத் தீர்க்கும் செல்வம்
இன்பமாம் கல்வி கற்பீர்..!

முடிவுரை

மாவீரன் உலகத்தைத் தம் கல்விக்குரிய பள்ளியாகக் கருதி உலாவந்ததாகக் கவிஞர் டென்னிசன் பாடுகின்றார். ‘கல்வி கரையில் கற்பவர் நாள் சில’ என நாலடியார் கூறுகிறது. கற்கத் தகும்கல்வி ஏராளம், மனிதனுக்கு வரையறுக்கப்பட்ட நாளோ சில, கல்வி கற்றவரிடம் ஒழுக்கம், பண்பு, நேர்மை, நீதி இவைகள் அனைத்தும் ஒருங்கே அமைந்து காணப்படும். எனவே, கல்வியானது ஒரு மனிதனின் முக்கிய தேவையாக இருக்கிறது. எந்தவொரு சமூகம் கல்வி இல்லாமல் இருக்கிறதோ, இக்காலத்தைப் பொறுத்தவரை மிகவும் தாழ்வாகவும், இழிவாகவும் கருதப்படும். ஒருவன் தான் எவ்வளவு கல்வி கற்றாலும் அதனை செயல் வடிவில் தக்க வைக்க வேண்டும். எல்லா மக்களிடமும் நன்றாக பழகிக் கொள்வதோடு மட்டுமில்லாமல் அவர்களுடன் மகிழ்ச்சியாக சேர்ந்து வாழ்வதற்கும் கல்வி கற்றவர்களால் தான் முடியும். இதனை அடிப்படையாகக் கொண்டு தான் கற்றல் கற்பித்தல் செயல்பாடுகள் இன்று சரியான திசையில் செல்வதை நாம் உறுதி செய்ய முடிகின்றது.

Use Of Multimedia And Animation In Teaching

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**“Technology lies at the heart of globalization process: affecting
Education, Work and Culture”**

- **Graddol**

The present era assign new challenges and duties on the modern teacher. The trend of teaching has been drastically changed with the remarkable entry of the new technologies. Technology provides many options to make teaching interesting and more productive in terms of positive changes. Technology is one of the most significant drivers of both social and linguistic change.

Technological innovations have gone hand-in-hand and are changing the way in which we communicate. In a sense, a tendency to emphasize on inevitable role of technology in pedagogy has been very dominant. Although nothing can fully replace an experienced teacher, technology has done much to assist teachers in their efforts in the classroom.

Multimedia

Multimedia is the combination of different content forms. It is usually recorded and played, displayed or accessed by information content processing devices such as computerized and electronic devices but can also be part of a live performance. It includes a combination of text, audio, still images, animation, video. It can provide a large amount of instructional information to the students for learning and accelerate the process of information searching. But it is not a substitute for teachers. A quality teacher would apply teaching methodologies from their years of teaching experience while adding the use of multimedia in their academic activities.

Animation

Animation deals with the generation sequencing and display of a set of images to create an effect of visual change or motion, similar to a movie. Animation is an important component of multimedia because just as a picture is powerful way to illustrate information, a small animation clip is even more powerful and useful for illustrating concepts which involve movement. For example it is very effective in illustrating the difference in the movement of a horse during a gallop versus a walk. If we carefully watch the advertisements for detergent soaps/powders, insecticides for mosquitoes and cockroaches, we will notice scenes in them which cannot be video graphed. These scenes are produced by using animation.

Use of Multimedia and animation in Education

Typical usages

- 1) To attract attention
- 2) To inform about the state of process.
- 3) Demonstrations
- 4) Interactive

Pedagogical function:

- 1) Motivation – Make students interested in some phenomenon and to explore it.
- 2) Representation- helps to support mental representation.
- 3) Organization
- 4) Interpretation – provoke cognitive conflicts that make students think.

How does Multimedia learning work?

A cognitive theory of multimedia learning has been presented by researchers which are based on three assumptions suggested by cognitive science research the dual channel assumption, the limited capacity assumption and the active learning assumption.

The dual channel assumption is that human possess separate information processing systems for visual and verbal representations. For example animations are processed in the visual channel and spoken words are in the verbal channel.

The limited capacity assumption is that the amount of processing that takes place within information processing channel is limited. For example, learners may be able to mentally activate only about a sentence of the narration and about 10 seconds of the animation at any onetime.

The active learning assumption is that the meaningful learning occurs when learners engage in active cognitive processing including paying attention to relevant words and pictures, mentally organizing into verbal and pictorial representations and mentally integrating verbal and pictorial representations with each other and with prior knowledge. This process of active learning results in meaningful learning outcome that can support problem-solving tendency.

Rationale for using Multimedia

Why would any teacher want to use multimedia in the classroom? With the availability of new technology teachers who saw themselves as “hip, cool and hi-tech” quickly incorporated the new tools correctly perceiving that slick multimedia presentations have a certain amount of entertainment value for learners. It also allows the learner to experience the material in a manner other than reading the text. It also addresses different learning styles by allowing the learner to access multiple paths for learning. It can also make learning more memorable and effective for the learners by increasing the learner’s retention and recall of topic. Using text alone incorporates a single learning modality but mixing text with animation enhances the learning experience for everyone. Animation is a great way to show cause and effect, process and results.

Software:

There is a lot of animation software and we can distinguish several sorts. Most animations now can be delivered over the web, usually through a browser extension/plugin.

- 1) Toolkits for micro-worlds and computer simulations-most support animation at scripting / authoring / user level.
- 2) Multimedia authoring systems - Today’s most popular general purpose environment in Adobe Animations.
- 3) Computer game engines.
- 4) Internet data formats
- 5) Cartoon animation software.

Conclusion:

Concerning the development of technology the use of internet and multimedia will be further developed. It is not a proxy for time and money-it needs to work effectively. While multimedia learning technology is not a panacea, it should occupy a prominent place in the 21st Century instructional tool box, as it is a significant tool for student learning.

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Optimistic Facet Of Ict In Education

⁹A. Manikandan

Introduction:

Information and communication technologies in education deal with the use of information and communication technologies (ICTs) within educational technologies. The purpose of ICT in education is generally to familiarize students with the use and workings of computers and related social and ethics issues. ICT has also enabled learning through multiple intelligence as ICT has introduced learning through simulation games; this enables active learning through all senses.

ICT in Education:

ICT allows use of participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technologies. By this definition you could almost say ICT is technologies version of economic growth, to satisfy the needs and wants of the community over time. ICT tools can be used to find, explore, analyze, exchange and present information responsibly and without discrimination. ICT can be employed to give users quick access to ideas and experience from a wide range of people, communities and cultures.

- **Change the teacher centered classroom in to student centered classroom:** With the help of ICT student centric classroom are not new. But the situations insist that such a classroom is not possible given the current school structure. The ICT feature a new role for the teacher, a complete shift away from the “sage on the stage” role to one that features a “guide on the side” mentality. In the student centered classroom, the teacher is a coach and mentor, a support person who troubleshoots and problem solves when students need such help.

Implementation of ICT in rural area schools while implementing ICT in rural area schools it is consisting of lot or installation expenditures. But if government gives necessary technical facilities the rural area higher secondary schools, it is possible to implementing ICT in a successful manner. Government will give also necessary technical professionals to the particular schools. Then only it is possible to implementing the ICT.

Many schools have specialized school status in technology and more recently in maths and computing these schools champion those of ICT to enhance teaching and learning.

In the United Kingdom information and communication technology is a subject in education and a part of the national curriculum all students must study information communication technology to GCSE level.

- **Improved access to education:** e.g. distance learning and on-line tutorials. New ways of learning, e.g. interactive multi-media and virtual reality. New job opportunities, e.g. flexible and mobile working, virtual offices and jobs in the communications industry.
- **New tools, new opportunities:** The second big effect of ICT is that it gives access to new tools that did not previously exist. A lot of these are tied into the access to information mentioned above, but there are many examples of stand-alone ICT systems as well:
 - a) ICT can be used for processes that had previously been out of the reach of most individuals, e.g. photography, where digital cameras, photo-editing software and high quality printers have enabled people to produce results that would previously required a photographic studio.
 - b) ICT can be used to help people overcome disabilities. e.g. screen magnification or screen reading software enables partially sighted or blind people to work with ordinary text rather than Braille.

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- **Employment gains :** In recent decades widespread incorporation of ICTs into many level of business, political processes and eructating of the global economy. ICTs have increased international interconnectedness and sped up the process of globalization. They have been instrumental in the information revolution, facilitating the transition from industrial economics, driven by the manufacturing sector to knowledge economics.
- **Access to information:** Possibly the greatest effect of ICT on individuals is the huge increase in access to information and services that has accompanied the growth of the Internet. Some of the positive aspects of this increased access are better, and often cheaper, communications, such as VoIP phone and Instant Messaging. In addition, the use of ICT to access information has brought new opportunities for leisure and entertainment, the facility to make contacts and form relationships with people around the world, and the ability to obtain goods and services from a wider range of suppliers.

National policy on ICT in school education:

The ministry of human resource development initiated policy formulation process on building a national policy on ICT in school education achieved another milestone. The ministry of human resources development, with its strategic, parents has engaged with approximately 400 members from the stakeholder community including education experts. ICT specialists, businesses, schools, teachers. Students and others to collate their views, suggestions and recommendations on a national policy on ICT in school education.

Positive and Negative Impacts

The computing industry includes Internet, computer hardware and software. Internet means a worldwide system of interconnected networks and computers. As we know that it is very useful for everyone today. For example, there are 5 out of 10 students using their iPad to search information while teacher is teaching. It is general and easy to have internet in the 21st century.

Then, software is the various kinds of programs to operate computers and devices. It is often divided into two different types of software which is application and system. Application software is a program designed for users. It also called and-user programs includes database programs, word processors, communications, games, graphics and spreadsheets. In contrast, system software consists of programs that interact with the computer at a very basic level. This includes assembler, debugger, compilers, file management tools, operating system and utilities for managing computer resources. Nonetheless, hardware is the physical aspect of computers and other devices. This could be monitor, CPU or memory chip. The item is something you can touch. The examples of hardware including the computer we touch and the mouse we use to click on this page.

Another example of tool is telecommunications which it means communication by electronic as through cellular phones, radio, video and others. We always get the latest news and information from all these media. For example, when we are driving to somewhere that very emergency, we usually open the radio to listen about the situation whether jam or not.

Last but not least, electronic display that include calculator is one of the tool of ICT. Electronic means operating, produced, or done by the action of electrons. Calculator helps people to solve the problem a lot and also in the society especially for the accountant. For example, calculator in the computer helps to solve the problem for every company.

As a result, modern information and communication technologies make a way for people to communicate with others across the world. For this reason, ICT is often affects the education today. Moreover, ICT in education can also be broadly categorized in the following way as a subject (computer studies), a tool to support traditional subjects (computer- based learning, presentation, research) and as an administrative tool (education management information systems). ICT is not only

has great impact on education but also provided some bad impact to the educators. Similarly, ICT also has some great impact on practitioners and schools.

In fact, ICT also gives educators the opportunity to transform the way learning happens, and enable student development. ICT present a range of tools that teachers or lecturers use to present and display as part of their teaching and help educators interact with students as well as engage them in a more meaningful way. These technological tools can be purposefully designed for education, for example, software or hardware used in the context such as word processors and spreadsheets. Computer tools help students and teachers manipulate complex data-sets. This then provides the context for effective discussion that help to develop subject understanding. ICT is beneficial for teachers to share resources, expertise and advice. It is also easier to plan and prepare lessons and design materials for students. Sometimes, ICT helps teachers to access up-to-date students and school data, anytime anywhere. Teachers can enhance their professional image by using ICT.

From a teaching point of view, teachers used these devices to deliver to a whole class, and could use the digital content effectively that was available to them. Teachers also reported that ICT offered them enhanced resources to support learning through teaching. The levels of interaction, the immediacy and the ability to refresh work, were all indicated as ways in which ICT could enhance the range of teaching approaches taken. In some colleges, teachers were expecting more of the students used ICT- whether this was due to the higher pace in lessons, work being done more quickly.

In fact, ICT empowers students to engage in the learning process and give them an interest in their personal education. By integrating ICT into the classroom, students have the ability to learn more effectively, collaborate with each other, and explore the world around them. Anytime, anywhere access to internet-based tools is necessary to encourage learning inside the classroom and beyond. For example, students who are always online or having facebook, they will always explore something and share with their friends. It unknowingly makes them more collaborate with each other. However, ICT provided e-learning to the learners. It is a flexible learning to those who are busy in their own things. For example, they have some people working since they are young. They work because of the family financial. Indeed, they are the people who want to work and study at the same time. E-learning is a way for them to study at home. It is useful and benefit for them. Other than that, hints and tips are the best practice for them to share their knowledge and opinion if they have their own ideas.

Today, ICT brings many benefits to the younger generation especially for students. For example, some of the students who work part-time also can find some time to do their College work. In addition, most of the time students like to use word processing from the computer itself. It is also quick and easy to edit their work and improve their presentation by using ICT. For example, we always use computer as the resources to get our work done in a time. Similarly like now, I using Microsoft Word to do my individual assignment. Besides, the Worldwide Web is the only way to have quick and easy access to information on any topic. ICT gives easy access to a world of knowledge and ICT which including quick guide is to learn 'the basic' of how to use the functions or applications. For example, printer is the one machine that will always show us the quick guide before we press start.

Referring to the information from the internet that I know with a range of ICT equipment, it improved the behavior management through better tracking of students. It helps not only to gain in understanding but also analytical skills which include improvements in reading comprehension as well as increase knowledge. For example, we have to read and understand the essay from the web-sites before we choose the article. It improves our understanding by reading. Moreover, ICT unknowingly help students improve in their development of writing skills such as spelling, punctuation, editing and grammar. Students can become more fluent and original in their work. For

instance, when we always read the article from the internet, we will get influence by the way the writer writes on the article.

Based on the research of Software and Information Industry Association 2000, students who used educational technology in colleges are more successful because they are more active in learning and in increasing their self-esteem. ICT then enhances and extends the possibilities of learning across the curriculum. Thus, ICT provides more opportunities to show their hard work to audiences or teachers as well as it is within 24 hours. For instance, we always see some students' work on the internet and it actually written by the writer himself. ICT help to show the ability of the students. ICT would be important to their future career or to employment. Students get to gain confidence because they could do things and show things they had not been able to do before, that students could explore more and share more ideas with others.

Conclusion:

ICTs have impacted education on many levels. They have extended the reach of education leading to a teacher centric classroom into student's centric classroom. With the help of ICTs new forms of employment in innovation and production of ICTs and a demand for highly skilled specialists in present world. To conclude once the teacher uses innovative ways to arouse interest and enthusiasm in the class he will be able to help the slow learners to optimize their abilities to meet the highest realistic expectation with the help of ICT.

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ICT in Innovative Teaching and Learning

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Introduction to ICT

Information and communication technology (ICT) is defined by UNESCO as forms of technology used for creating, displaying, storing, manipulating, and exchanging information (Meleisea, 2007). ICTs, in general, consist of computers, hardware and software, networks, learning management systems, e-mail, internet, telephone, television, radio and so forth.

In the 1960s and 1970s, schools and universities started to use printed material, television, radio, overhead projectors and movies in teaching. Since personal computers and the internet began being more widely used in the late 1980s and early 1990s, the use of ICTs in education has grown rapidly. The proliferation of personal computers and the Internet resulted in significant changes in the implementation of ICTs in education. ICTs included not only learning resources but also tools to facilitate interaction and collaboration (Caladine, 2008; Taylor, 1995). Learning management systems

such as Blackboard and WebCT became widespread. Social networking sites (e.g. FaceBook, Flicker and Yahoo3600) permitted people to create profiles and upload information including text, photos, pictures, audio files and video files. The users could also add, edit and remove content.

ICT and Education

ICT to enhance teaching and learning environments.

ICT enables self-paced learning through various tools such as assignment, computer etc as a result of this the teaching and learning enterprise has become more productive and meaningful.

ICT helps facilitate the transaction between producers and users by keeping the students updated and enhancing teachers capacity and ability fostering a live contact between the teacher and the student through e-mail, chalk session, e-learning, web-based learning including internet, intranet, extranet, TV audio-video aids, CD-ROM.

Edusat technology has become very powerful media for interactive participation of experts and learners and it reaches the unreachable.

Emerging Learning Technology (ELT) of bogging, Integrated Learning

A Modules, a pod cast, wikis, Enhancement of Browsers, e-learning, M-learning, U-learning have started making rapid strides in teaching learning processes.

Information and Communication Technology and Learning

The focus of ICTs in this study is the use of internet, software, multimedia resources, course management systems and computer-based testing systems in education. The applications of ICTs in learning resources include educational software, distributed resources via the internet and video resources. Educational software is not only learning resources for students but also tools for instructional organisation of learning. Examples of physics education software are Physics Pro,

Crocodile Physics and Andres Physics. Rich learning resources distributed via the internet and video resources are also considered important.

ICT is also utilised to promote communication. The use of ICTs in this domain consists of e-mail systems and websites which offer variable communication options and software systems for text-based chat and other forms of communication.

In its broadest meaning, ICT embraces many forms of technology, and a limitation of this research is that it only explores ICT in terms of internet, software, multimedia resources, course management system and computer-based testing systems. The applications of ICTs are categorised into three groups relating to three vital factors of the education process: learning, teaching and communicating (student-student and student-teacher).

Why Teach With ITC

Information & Communication technologies are “ technological tools and resources that are used to communicate and to create disseminate, store & manage information” – C.Blurton

They “include hardware, software & netware as well as institutional, financial, cultural & application-related parameters that determine how ICTs will be shaped and developed by society at large”- The Research Council of Norway.

Advantage of ICT in Education

Use of packages: word-processing, dtp, spreadsheets.

Special facilities for pupils with disabilities.

Teacher and pupil communications improve.

ICT provides links with other schools or with business.

Computers in schools provides wider access to ICT and encourages new ways of learning

Can repeat again and again and again.

Scope of ICT in Education

A person from village also can refer the latest information and research every day.

Television broadcast is one of the best communication media to educate students.

The difficult experiments, advance surgery for medical students etc. Can be viewed.

LCD projectors can be used for effective training.

The man power problem, the human mistakes can be avoided by on-line examination.

ICT tools

Multimedia PC, Laptop, Notebook.

CDs&DVDs, digital video, still camera.

Internet and its tools- e-mail, browsers, website, search engines, chat etc.

Computer aided instruction & computer mediated video/audio conferencing.

Digital libraries, e-books & electronic publications.

Microsoft publishing- news letter, poster, brochure.

Multimedia and its elements

“Multimedia is any combination of text, graphic art, sound, animation, and video that is delivered by computer. When you allow the user – the viewer of the project – to control what and when these elements are delivered, it is interactive multimedia. When you provide a structure of linked elements through which the user can navigate, then the interactive multimedia becomes hypermedia”.

Optimally all physics classes should include the following: real hands-on experiments, demonstration experiments performed by the teacher, simulations, embedded videos, or other new technologies.

In PHYSICS Laboratory

Laptop

Video Projector

Interactive White Board

Interactive White Board

Increases student participation

Improves learning and memorizing process

Makes classes more dynamic

Increases the level of interactivity.

TPCK Model

A model which appears popular for integrating ICT in education is the Technology Pedagogy Content Knowledge (TPCK) Model. The TPCK Model describes the inter-relationship between content, pedagogy and technology and then emphasises the importance of the integration of the three areas in developing effective teaching for learning.

Knowledge of content (C) in the model is an understanding about subject matter. Teachers must be knowledgeable about the field of teaching, including facts, concepts, principles, theories, procedures and the structure of knowledge in their disciplines. Pedagogical knowledge (P) is knowledge about teaching and learning. Teachers also need to know the nature of learning; for example, how students construct knowledge and what a cognition process is, Methods of teaching, student assessment, instructional design and classroom management are also elements of pedagogical knowledge. Technology knowledge (T) involves the awareness of skills in operating and applying technologies such as computer software, the internet and LCD projectors.

Positive Impact on ICT on education

Ensures life long learning.

Also enable distance learning.

We can access teaching materials and experts from all over the world.

It has the ability to perform impossible experiments by using stimulations.

Possibility for students to have individual learning.

Man power problem and human problems can be avoided by conducting online examinations.

The curriculum, information about text books, reference books are available using ICT.

Conclusion:

Information and Communication Technology makes many common tasks simple and facilities communications from virtually any geographic area. This Paper clearly shows that Modern ICT enabled Innovative Education Technologies can change the current paradigm of education through enhanced learning.

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ICT in Innovative Teaching and Learning

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They “include hardware, software & netware as well as institutional, financial, cultural & application-related parameters that determine how ICTs will be shaped and developed by society at large”- The Research Council of Norway.

ICT allow:

To teach in different new ways: explain, show, demonstrate, monitor and especially supervise learners in various adapted manners.

To learn differently: by appropriating the knowledge, in a individualized, interactive, cooperative, collective way by treating information in the time and in the space.

To question both concepts of time and space by reducing the distance and by changing the presence, according to new interesting modalities for education.

Information and Communication Technology in Learning

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ICT and Education

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- ICT enables self-paced learning through various tools such as assignment, computer etc as a result of this the teaching and learning enterprise has become more productive and meaningful.
- ICT helps facilitate the transaction between producers and users by keeping the students updated and enhancing teachers capacity and ability fostering a live contact between the teacher and the student through e-mail, chalk session, e-learning, web-based learning including internet, intranet, extranet, TV audio-video aids, CD-ROM.
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- Computer aided instruction & computer mediated video/audio conferencing.
- Digital libraries, e-books & electronic publications.
- Microsoft publishing- news letter, poster, brochure.

Multimedia and its elements

“Multimedia is any combination of text, graphic art, sound, animation, and video that is delivered by computer. When you allow the user – the viewer of the project – to control what and when these elements are delivered, it is interactive multimedia. When you provide a structure of linked elements through which the user can navigate, then the interactive multimedia becomes hypermedia”.

Optimally all physics classes should include the following: real hands-on experiments, demonstration experiments performed by the teacher, simulations, embedded videos, or other new technologies.

In PHYSICS Laboratory

- Laptop
- Video Projector
- Interactive White Board

Interactive White Board

- Increases student participation
- Improves learning and memorizing process
- Makes classes more dynamic
- Increases the level of interactivity.

TPCK Model

A model which appears popular for integrating ICT in education is the Technology Pedagogy Content Knowledge (TPCK) Model. The TPCK Model describes the inter-relationship between

content, pedagogy and technology and then emphasises the importance of the integration of the three areas in developing effective teaching for learning.

Knowledge of Content (C) in the model is an understanding about subject matter. Teachers must be knowledgeable about the field of teaching, including facts, concepts, principles, theories, procedures and the structure of knowledge in their disciplines. Pedagogical knowledge (P) is knowledge about teaching and learning. Teachers also need to know the nature of learning; for example, how students construct knowledge and what a cognition process is. Methods of teaching, student assessment, instructional design and classroom management are also elements of pedagogical knowledge. Technology knowledge (T) involves the awareness of skills in operating and applying technologies such as computer software, the internet and LCD projectors.

Advantage of ICT in Education

- Use of packages: word-processing, dtp, spreadsheets.
- Special facilities for pupils with disabilities.
- Teacher and pupil communications improve.
- ICT provides links with other schools or with business.
- Computers in schools provides wider access to ICT and encourages new ways of learning.

Positive Impact on ICT on education

- Ensures lifelong learning.
- Also enable distance learning.
- We can access teaching materials and experts from all over the world.
- It has the ability to perform impossible experiments by using stimulations.
- Possibility for students to have individual learning.
- Man power problem and human problems can be avoided by conducting online examinations.
- The curriculum, information about text books, reference books are available using ICT.

Scope of ICT in Education

- A person from village also can refer the latest information and research every day.
- Television broadcast is one of the best communication media to educate students.
- The difficult experiments, advance surgery for medical students etc. Can be viewed.
- LCD projectors can be used for effective training.
- The man power problem, the human mistakes can be avoided by on-line examination.

Conclusion:

Information and Communication Technology makes many common tasks simple and facilitates communications from virtually any geographic area. This paper clearly shows that Modern ICT enabled Innovative Education Technologies can change the current paradigm of education through enhanced learning.

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Today's Evaluation System in India – Is it in real sense?

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What make a child gifted and talented may not always be good grades in school, but a different way of looking at the world and learning.

- Chuck Grassley

The methodology of entire teaching, learning and evaluation system has gradually undergone many changes. Long back during 'Gurukula' period the teaching learning and evaluation not only mental ability but also physical ability and level and speed of performance. It was successful during those days as the need of the hour was such one. But as science and technology improved, the strategies of teaching, learning and evaluation also underwent many remarkable changes. The old 'teacher-cantered' education has become the 'student-cantered one'. Especially the method of evaluation has crossed many stages right from 'direct performance based method' of Gurukula period to today's 'online testing'. But the effectiveness and accuracy of the present evaluation method is really a question without answer.

According to Cambridge Dictionary Evaluation means judgement or calculation of the quality, importance, amount, or value of something. Vocabulary.com dictionary states that an evaluation is an appraisal of something to determine its worth or fitness. The Free Dictionary quotes Evaluation as the process 'to ascertain or fix the value or amount of; or to determine the importance, effectiveness, or worth of;'. Merriam-Webster Dictionary defines Evaluation as the process to judge the value or condition of (someone or something) in a careful and thoughtful way. Almost all the definitions point out the fact that evaluation is the accurate and careful assessment of the quality of something or someone.

The present evaluation system in most of the colleges and universities based on written examinations and they are highly examiner-oriented. The mood of the examiner plays a vital role in awarding marks. There is no common rules in valuing the written exam answer keys. Though a blue print is given to set the questions, many examiners violate the blue print. Though the examiners receive a scheme of valuation they never follow that. If the same answer script is handed over to two examiners of equal rank, it is obvious that the scores awarded by them vary in a large manner in most cases and quite contrary in few cases. So the real knowledge of the students cannot be assessed by the examiners in this method.

Consequently another question may appear in everyone's mind that whether these written examination method can really assess the students' intelligence. It is a matter of chance. The entire process of education is ultimately judged by mere written examinations for a set questions within a stipulated time. Students' ability is much restricted to studying something and reproducing that in the exam papers. Whether this written examinations bring out the real intelligence of the students is still a question. There is no room for testing a student's real talents and capabilities. The level of his intelligence cannot be assessed by the written examination. The written examination system just reflects only his memory power not his real intelligence level.

Mostly Indian Examination system is contextual. It never bothers the psychological status of the students. If a bright student is ill or depressed at the time of the examination due to some family or some social cause, he cannot write his paper well. He is usually made failed and it is indicated that he has lower level of intelligence. The examiners or the general system never bothers about this status. If the same student appears for the same exam when he is well he would have got good scores. The Indian examination system is just like a mechanical one which has no botheration of the psychological and sociological factors of the students. Also the examinations never test any skills of the students including analysis, synthesis and problem solving. It fails to test the all round personality

and real intelligence level of the students. It is a clear fact that many great scholars in real life have performed very poor in their examinations.

The success in the examinations does not lie in the real intelligence of the students but mostly lies with the selection of the portions to be covered. It cannot predict any sort of proficiency of the students. Mostly average students get high scores just by studying or memorised some selected topics but the students with real analytical mind do not come out with high scores. Many great people and scientists such as Albert Einstein, Ramanujan and even Winston Churchill were the poor performers in the examinations.

Steve Jobs, Bill Gates and Mark Zuckerberg didn't finish college.

Too much emphasis is placed on formal education - I told my children not to worry about their grades but to enjoy learning.

- Nassim Nicholas Taleb

Also present examination system never encourages the students to prepare methodically and regularly instead it gives all chances to the students for a last minute preparation. The student who burns his midnight oil just a day before the examination can perform better than the meticulous students. As the written examination is the one and only mode of testing the students seek even foul means to get through the examination such as copying etc. Such a way present examination system indirectly encourages a sort of negative approach, idleness and carelessness inside the classrooms.

So the pattern of the evaluation system should be improved. The final written examination should not be the only scale to value the excellence level of the students. Though the written examination is unavoidable the mode of the examination should be changed. There should be a regular and periodical measurement through some sort of real tests and assessments. A sort of comprehensive evaluation pattern should be developed. Also the examination should lead some way to develop thinking and analysing. It should not be a mere test of memory power. The examinations may include various practical testing modes such as assignments, seminars, presentation and projects in a regular and periodical manner. Also writing the answers should not be the only way to test a students' knowledge but group discussion, collection of relevant supporting information, proper documentation of such records and solving the real life problems also can be included in the assessment system. The evaluation system should indirectly initiate the students to attend classes regularly, listening to the teaching with full concentration and preparing in a regular manner without any idleness or carelessness.

Now a days the assessment mode is only teacher connected. If the teacher has any ill-feeling against the students, they can be victimised and revenged very easily. This situation should be avoided. The assessment should be with parents and society too such as home efficiency test and community activities profile. There should be a room for self evaluation too. Self evaluation is the most effective assessment tool which will enable students to rectify their mistakes.

Screaming at children over their grades, especially to the point

of the child's tears, is child abuse, pure and simple. It's not funny and it's not good parenting. It is a crushing, scarring, disastrous experience for the child. It isn't the least bit funny.

- Ben Stein

The wrong tendency of the parents too should be changed. They want their children to be any one of the high ranked personality in the society and so they encourage their wards to concentrate only the ways and means to get good scores in the final examinations. The real interest of the students is ignored in all levels including their parents. Many students are forced to choose the courses where their interest does not lie. That sort of students cannot study the courses successfully and finally they seek the loop holes in the examinations which have plenty actually in its nature.

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Use of Multimedia Technology in Teaching and Learning communication skill

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Introduction:

With the spread and development of English around the world, English is used as a second language in a country like India and for some people the 1st language. It enjoys a high prestige in the country. At present the role and status of English in India is higher than ever as evidenced by its position as a key subject of medium of instruction, curriculum. As the number of English learners is increasing different teaching methods have been implemented to test the effectiveness of the teaching process. Technology provides so many options as making teaching interesting and also making teaching more productive in terms of improvements. At present the role and status of English is that it is the language of social context, political, socio cultural, business, education, industries, media, library, communication across borders, and key subject in curriculum and language of imparting education. It is also a crucial determinant for university entrance and processing well paid jobs in the commercial sector.

Objectives of Study:

1. To Study the development of Multimedia Technology in Teaching and Learning.
2. To Study the satisfaction level of Multimedia Technology in Teaching and Learning.
3. To improve the quality of Multimedia Technology in Teaching and Learning.
4. To know the preference of Multimedia Technology in Teaching and Learning.
5. To Demographic profile of Multimedia Technology.

Methodology:

The primary data have been collected directly from the through on questionnaire. secondary data have been collected from standard books, articles, magazines, encyclopedia and website.

• Primary data

The study mainly based upon the primary data. Interview schedule method is used to collect the data from the respondents. Sample sizes 50 respondents have been appended in the research report.

• Secondary data

To substantiate and to support the primary data required particular have been gathered by referring the reputed journals, magazines, standard newspaper and book. Some of the information has been gathered from authorized web source.

Review of Literature:

Rickey and Stacy (2000)¹ in his paper entitled “Multimedia Technology in Teaching and Learning process” analyzed the importance of metacognition in regards to teaching and learning chemistry. They suggested that there are four principle facets of metacognition: descriptive and declarative knowledge of one’s own mental processes, the ability to monitor one’s own thinking and understanding, and the ability to regulate that thinking as well as the flexibility and inclination to apply those practices to solving problems.

Stroud and Schwartz (2010)² in his article “Multimedia Technology in Teaching and Learning process” emphasises the role of metaphors and graphics as tools to enhance students’ learning of complex topics was investigated. Stroud and Shwartz suggested that students struggle learning chemistry due to the abstract nature of certain concepts which can also be hard to visualize.

Traditional style lectures develop students' verbal processing, but they do not stimulate visual processing or encoding to the same degree.

Diehl and Reese (2011)³ in his work titled "Multimedia Technology in Teaching and Learning process" revealed that students who were shown elaborated metaphors reflected better performance in higher level thinking inferences. They argued students unaware of their own cognitive processes were unlikely to recognize when their ideas are unproductive, and these students often struggled when they come across contradictions within data and observations.

Use of Technology in teaching communication skill:

As the use of English has increased in popularity so has the need for qualified teachers to instruct students in the language. It is true that there are teachers who use 'cutting edge' technology, but the majority of teachers still teach in the traditional manner. None of these traditional manners are bad or damaging the students. In fact, till date they are proving to be useful also. However, there are many more opportunities for students to gain confidence practice and extend themselves, especially for ESL students who learn the language for more than just fun.

The Growth of ELT Through Technology:

English communication skill Teaching has been with us for many years and its significance continues to grow, fuel led, partially by the Internet. For the first time there are more Non-Native than Native users of the language and diversity of context in terms of learners, age, nationality, learning background etc has become a defining characteristic of ELT today. With the rapid development of science and technology, the emerging and developing of multimedia technology and its application to teaching, featuring audio, visual, animation effects comes into full play in English class teaching and sets a favorable platform for reform and exploration on English teaching model in the new era.

Analysis on Necessity of Application of Multimedia Technology in English communication Teaching:

1. To Cultivate Students Interest in Study:

Nowadays, the stereotyped traditional teaching methods and environment are unpopular while multimedia technology featuring audio, visual animation effects naturally and humanely makes us more access to information besides, with such characteristics as abundant information and crossing time and space, multimedia technology offers a sense of reality and functions very well, which greatly cultivates students' interest and motivation in study and their involvement in class activities.

2. To Promote Students Communication Capacity:

Traditional teaching has hampered students' capacity to comprehend certain language and also understanding to structure, meaning and function of the language, and makes the students passive recipients of knowledge, So it is hard to achieve the target of communication. With teachers' instructions leading students' thought patterns and motivating students' emotions, the multimedia technology seeks integration of teaching and learning and provides the students greater incentives, The PPT courseware activate students' thinking; the visual and vivid courseware and help them to transforms English communication into capacity cultivation.

3. To Improve Teaching Effect:

Multimedia teachings enrich teaching content and make the best of class time and break the "teacher centered" teaching pattern and fundamentally improve class efficiency. Due to large classes it is difficult for the students to have speaking communication. The utilization of multimedia sound lab materializes the individualized and co-operative teaching.

4. To Improve Interaction Between Teacher and Student:

Multimedia teaching stresses the role of students, and enhances the importance of "interaction" between teachers and students. A major feature of multimedia teaching is to train and improve

students' ability to listen and speak, and to develop their communicative competence, During this process, the teacher's role as a facilitator is particularly prominent.

5. Creates a Context for Language teaching:

Multimedia teaching creates a context for language teaching. This method makes the class lively and interesting, as well as optimizing the organization of the class. Multimedia has its own features such as visibility and liveliness. Multimedia and network technology we can offer students not only rich, sources of authentic learning materials, but also an attractive and a friendly interface vivid pictures and pleasant sounds, which to a large extent overcomes the lack of authentic language environment and arouses students' interest in learning English communication skill.

6. To Provide Flexibility to Course Content:

In addition, multimedia teaching is also flexible. It is obvious that the context can be created not only in the classroom, but also after class. Multimedia language teaching can also create a multimedia language environment for the purpose of conducting English communication teaching.

Analysis on Problems Arising from Application for Multimedia Technology to English communication Teaching:

In spite of advantages of application of multimedia technology to English communication teaching has to improve teaching effect and university students' overall capacities, there are many problems existing in practical teaching, such as:

1. Major Means Replaced by the Assisting One:

Application of multimedia technology is and assisting instrument to achieve the projected teaching effect While if totally dependent on, multimedia devices during teaching, the teachers may be turned into slaves to the multimedia and cannot play the leading role in teaching, It is observed in practice that a lot of teachers are active in multimedia technology application but not proficient enough to handle it confidently.

2. Loss of Speaking Communication:

English communication analysis by the teachers are effective in conveying knowledge to the students from English pronunciation to comprehension, improving students' English thought patterns and oral expression.

3. The restriction of Students Thinking Potential:

Teachers raise impromptu and real-time questions and guide the students to think, cultivate their capacity to discover and solve problems; however, due to over demonstration and pre-arranged order, the courseware lacks real-time effect and cannot give feedback.

Suggestions and Strategies to the Existing Problems:

It is improper to duplicate the textual material simply to the screen so that the teacher's position is ignored In order to ensure the function of, multimedia in teaching.

1. The Computer Screen can't Substitute the Blackboard:

Some teachers take the computer screen as the blackboard, They have input exercises, questions, answers and teaching plans into the computer and display them piece by piece, without taking down anything on the blackboard or even the title of a lesson.

2. Power Point cannot Take the Place of Student's Thinking and Practices:

At present, most multimedia courseware mainly feature on image and animation of teaching materials in order to cause audio and visual effect, which lively displays the content of textual materials and helps the student deeply understand the texts.

3. Multimedia Technology should not be Over used:

Some teachers may possess the improper concept that they would totally apply multimedia technology in their teaching. It is also believed that the more utilization of multimedia technology, the better class atmosphere may grow, the more actively the students get involved in class participation, the more easily the material access to the students.

Table:1Demographic Profile of the Respondents

Particulars	No. of. Respondents	Percentage
Age		
Below 30 years	20	40
30 - 40 years	15	30
40 – 50 years	10	20
Above 50 years	5	10
Marital status		
Married	26	52
Unmarried	24	48
Nature of family		
Joint family	28	56
Nuclear family	22	44
Educational qualification		
Upto H.S.C	10	20
Degree/Diploma	12	24
P.G.Degree	18	36
Professional Degree	10	20

Location		
Rural	22	44
Urban	28	56

Table1 shows that out of 50 respondents, 40 percent of respondents are in the age group of below30 years, 52 percent of the respondents are married, 56 percent of the respondents are joint family, 36 percent of the respondents are completed P.G.degree and 56 percent of the respondents are living in urban areas.

Table:2Age and level of satisfaction

Age	Highly Agree	Agree	Neutral	Disagree	Highly Disagree	Total
Below 30 years	8	5	4	2	1	20
30 – 40 years	2	3	5	3	2	15
40 – 50 years	1	3	2	2	2	10
Above 50 years	1	1	1	1	1	5
Total	12	12	12	8	6	50

Calculated chi square value=7.35

$= (R-1, C-1)$

$= (4-1, 5-1)$

$= 3 \times 4 = 12$

Degree of freedom=12

Table value(5%) of significant=6.25

Since the calculated value (7.35) is greater than table value (6.25), so the null hypothesis is rejected.

Hence, it can be concluded that there is a relationship between the age of the respondents and level of satisfaction.

Conclusion:

It is true that one of the ultimate goals of multimedia language teaching is to promote students motivation and learning interest, which can be a practical way to get them involved in the language learning. Context creation of ELT should be based on the openness and Accessibility of the teaching materials and information. Concerning the development of technology, we believe that in future, the use of multimedia English teaching will be further developed. The process of English communication learning will be more student-centered but less time-consuming.

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ICT in Innovative Teaching and Learning

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Introduction:

Creativity is often seen as a talent, or as a characteristics of eminent people. Distinctive personality traits have been identified to exemplify a creative mind. At the same time, a number of studies recognize that creativity can be enhanced and cultivated. Teachers have to attract their interest and attention in a new way and as a result the development of creative approaches. Secondly, the current and forthcoming cohorts of learners are growing up surrounded by video games, mobile phones, and other digital media. The advantages of creativity for the society and individuals, one would expect to see a wide spread of creative practices in India.

Objectives:

- To strengthen position of hardware and associated infrastructure.
- To deepen parental engagement.
- To promote new behaviours for teaching.
- To improve confidence in use of ICT for learners, teachers, schools, leaders and parents.
- To change the culture of the use of ICT.

Review of literature:

Mayers(1981)(1) in his paper titled "ICT in innovative teaching and learning" analyses the professional skills for the digital age classroom.

Lehrer sara(1981)(2) in his article, "ICT in innovative teaching and learning" examined to create a framework to support educators in "charting their course towards the effective use of technology in learning".

Nafziger(1983)(3) in his paper titled "ICT in innovative teaching and learning" analyses the progress for each dimension based on the stages of instructional evolution.

Different uses of ICT –enabled learning:

Many different uses of ICT in education are possible. These range from using ICT as tools to support traditional ways of teaching to fully ICT-enabled course that entail a completely different way of teaching. The use of e learning is tertiary education, the OECD distinguishes four different levels,

- Web-supplemented courses focus on classroom-based teaching but include elements such as putting a course outline and lecture notes outline, the use of e-mail and links to online resources.
- Web-dependent courses, require students to use the internet for key elements of the programme such as online discussions, assessment or online project work, but without significant reduction in the classroom time.
- In mixed mode courses, the e-learning elements begins to replace classroom time. Online discussions, assessment, project or collaborative work replace some face to face teaching and learning.
- In fully online courses, students can follow courses offered by a university in one city from another town, country or time zone.

Teaching Training:

The need for teacher training is acknowledged. Teachers, trainers and other learning facilitators have to be given the knowledge examples and time to "adopt" ICT in their daily practices.

Teacher training should not just encompass ICT skills but rather a full understanding and complete mastery of ICTs as pedagogical tools. Thus, policies on developing teacher training should look only at quantitative measures such as significant investments and numbers of training courses but also at the qualitative impact of the actions promoted.

Emerging contours of future learning enabled by ICT:

This is growing awareness in Europe that looking at the future is important and necessary in order to better grasp the opportunities that will arise as our societies move towards an increasingly digitalized, networked and knowledge based society. There is no doubt that the role of ICT as an enabler of these changes is stronger now a days than ever. ICT can definitely help in organizing and providing structure for the teachers material to students, and in following progress of a given learning, in authenticating, searching and prioritizing the material.

The key objective of learning will be to obtain and create knowledge at the right time, in the right place, in the right way, in the right device and available for everyone.

As a general statement, it might be said that ICT proficiently will be at the centre of required skills in the future. Integrating ICT literacy will be crucial, as it means harnessing technology to perform learning skills.

Methodology:

The primary data and secondary data were used. The primary data were collected through questionnaire. The secondary data are collected from various books. Percentage analysis and rank test are used as statistical tool for analyzing the data. The sample size is fifty.

Findings:

- Most of the respondents were belong to the age group of 20-30 years.
- The present study indicates that, the innovation in teaching and learning.
- Very less proportion of the respondents were belong to the age group of 51-60 years.
- Most of the respondents face the problem of technical innovation.
- Most of the respondents are belong to the joint family.

Conclusion:

It is necessary to take a broad view in order to understand how ICT impacts on learning. This is because educational achievements are shaped not only by the way education is organized but also by the socio-economic background of the learners. Moreover, progress is still needed in providing learning content and learning technologies.

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A STUDY ON E-LEARNING

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INTRODUCTION

E-learning is an abbreviation of the term electronic learning. Electronic learning in its literal meaning stands for the type of learning carried out facilitated or supported by some or the other electronic gadgets, media or resources. Judging in this sense, the learning facilitated by the use of an electronic media or means like microphones and listening devices or audio and visual tapes can be termed as e-learning.

In this sense, e-learning calls for the services of the advance electronic information and communication media and mean like teleconferencing, video-conferencing and computer based conferencing, e-mail, livechat, surfing on the internet and web browsing, online reference libraries, video games, customize e-learning courses etc.

DEFINITION

1. Elliott Masie “The use of technology to design, deliver, select, administer, support and extend learning.”
2. Percepsys “using a technological means [Internet/Intranet/Extranet] to access and manage learning that supports and enhances the knowledge of an individual.”

THE HISTORY OF E-LEARNING

E-learning has only been in existence since 1999, when the world was first utilized at a CBT systems seminar. Other words also began to spring up in search of an accurate description such as “online learning” and “virtual learning.” However the principles behind e-learning have been well documented through out history and there is even evidence which suggests that early forms of e-learning existed as far back as the 19th century.

OBJECTIVES

- To understand the basic of E-learning
- To know about technology that based on E-learning
- To know the performance of E-learning
- To describe systems and technology in E-learning
- To identify the rules of e-learning specific, measurable, timed, short, observable

REVIEW OF LITERATURE

Lau & Sim (2008)¹ in their article explained “**Exploring the extent of ICT adoption among secondary schools teachers in Malaysia**” Research undertaken in Malaysian secondary schools showed that even older teachers do well implementing e-learning with appropriate training and support.

Fuchs & Woessmann (2004)² in their study on “**Computers and students learning:Bivariate and multivariate evidence on the availability and use of computers at home and at school**” Provide a good summary of research in to the impact of e-learning on students.

Walton,R.,Putnam,C.,Johnson,E.,&Kolko,B.,(2009)³ conducted a study on “**Skills are notbinary:Nuances in the relation ship between ICT skill and employability**” examined the relationship between ICT skills and employability in the context of a transitioning economy by examining the Kazakh stancase.

THE HISTORY OF E-LEARNING

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NATURE AND CHARACTERISTICS OF E-LEARNING

Empowered by digital technology

E-learning is pedagogy empowered by digital technology.

Computer enhanced learning

E-learning is a term which is used to refer computer enhanced learning.

Technology enhanced learning

E-learning includes all types of technology enhanced learning [TEL],where technology is used to support the learning process.

Online learning

Use of e-learning is generally confined to “online learning”carried out through the internet or web-based technology,with no face-to face interaction.

More than CBL and CAI

E-learning conveys broader meaning that the terms CBL[Computer Based Learning]and CAI[Computer Assisted Instruction].

More than online learning

E-learning is broader in its meaning that they conveyed through the simple terms like “online learning”or “online education.”

Not synonymous to audio-visual and multimedia learning

E-learning should not be considered as synonymous to audio-visual learning,multi-media learning,distance education or distance learning.

Confined to web-based and internet-based learning

The use of the term e-learning should be confined to the type of learning carried out, supported or facilitated through web enhanced instruction and the internet based communications like e-mail, audio and video conferencing, mail list, live chats and telephony.

Exclusion of non-internet and non-web technology

All types of non-internet and non-web technology are included in e-learning. Taking a clear stand on this issue Kumar and John (2008) write, "Though computer is used for instructions, and learning the non-web technology thus come under technology. The entire computer based instructions, computer managed instructions, integrated learning system, multi media, interactive video, virtual reality, artificial intelligence, etc., which are not delivered through the internet but are still used for learning and instruction cannot be included in e-learning. However, these techniques, when delivered via internet for instruction and learning, become e-learning"

MODES STYLES OF E-LEARNING

The essential condition for calling a particular learning as e-learning lies in its characteristics of delivering the instructional contents through advanced electronic means.

Support learning

E-learning can play a more supporting role to the teaching-learning activities organized in the class. As a result, a teacher may make its use for his better teaching and a learner for his needed learning, e.g., they may use multimedia, internet and web services for their teaching and learning to enhance their class room activities.

Blended learning

In this mode, attempts are made for making use of a combination of traditional and ICT enhanced e-learning practices. The programmes and activities are so planned and executed as to present a happy combination of both the traditional class room teaching practices and e-learning based instructions.

Complete e-learning

In this mode of learning the traditional class room teaching-learning is to tally by the virtual class room teaching-learning environment as happens in the traditional setup of school education.

ADVANTAGES OF E-LEARNING

Individualized instructions

E-learning provides individualized instructions suiting to the need, abilities, learning styles and interests of the learners. E-learning has much potential to make the education, instruction and learning opportunities provided to the learners adaptable to their need, local need and resources at their hands.

Easy access

The learner gets access to learning by breaking all barriers of time, place and distance. The learners can access information and education contents anytime and at any place.

Qualitative

E-learning has a unique feature of arranging an access to unlimited number of students the same quality of the content that a full time students.

Flexibility

E-learning may make the students more interested and motivated towards learning as they may get a wide variety of learning experiences by having an access to multimedia.

Self-learning and Self-improvement

E-learning leads to self-learning. It can be utilized for improving technical and vocational skills.

DISADVANTAGES OF E-LEARNING**Requires knowledge and skills**

E-learning requires special knowledge and skills for the use of multimedia internet and web technology on the users.

Lack of equipment

Most of our schools are not at all ready, willing and equipped for making use of e-learning in the proper interest of the teachers and students.

Costly

E-learning is more costly than traditional education. E-learning tools are very expensive. Hence, e-learning is beyond the reach of most of the students.

Adverse effect on health

E-learning adversely affects the eyesight and some other parts of the body. The learners become physically inactive. Some times they become victims of physical diseases.

Lack of co-curricular activities

Co-curricular have great importance in the field of learning and education. But these activities are neglected in e-learning.

Technical defect

E-learning is based on technology. When technical defect occurs, e-learning stops.

As a result, continuity of learning is broken and is no progress in e-learning.

THE FUTURE OF E-LEARNING

As computer ownership grows across the globe e-learning becomes increasingly viable and accessible. Generally speaking learning is expensive, takes a long time and the results can vary. E-learning has way learn to make it more effective and measurable.

Micro-learning

It focuses on the design of micro learning activities through micro-steps in digital media environments which already is a daily reality for today's knowledge workers. It is also perfectly suited for mobile devices where long courses can be overkill.

Gamification

It is the use of game thinking and game mechanics in a non-game context to engage users and solve problems.

The distant future:Automatic learning

This type of automatic learning might sound like a dystopian future for many but it is where we are heading.

Personalized learning

It is the tailoring of pedagogy,curriculum and learning environments to meet the needs and aspirations of individual learners.This may not indicate unlimited choice since learners will still have targets to be met.

Table-1**Analysis onMarital status of the respondents**

S.No	Marital status	No.of respondents	percentage
1	Married	30	60
2	Un married	20	40
	Total	50	100

Source:Primary data

Inference

The above table shows that out of 50 respondents,30of the respondent are married and remaining 20 of the respondent are un married.

Table-2**Level of satisfaction**

The significant relationship between opinion towards positive statement and level of satisfaction of e-learning,chi-square test is attempted with the null hypothesis.

Statement	Highly agree	Agree	Neutral	Dis agree	Highly dis agree	Total
My Learning skills increased by education	2	3	2	1	3	11
It saves times	1	2	5	2	2	12
Reduces cost	2	5	4	2	2	15
Reduces burden	3	2	2	3	2	12
Total	8	12	13	8	9	50

Source:Primary data

Calculated chi square value = 3.114

Degree of freedom = 4

Table value (5%) of significant = 6.2560

Since they calculated value (0.538) is less than table value (5.991).So the null hypothesis is accepted.

It is concluded that there is no relation ship between the marital status and satisfaction level of respondents.

Table-3

Analysis learning methods of students

Statement	Garrett mean score	Rank
Audio learning	50.36	3
Power point presentation	53.78	2
Video learning	47.44	4
Teaching skills	43.33	5
Different material learning	64.36	1

Source:Primary data

The above table reveled that different material learning ranked first with the garrett mean score of 64.36.Power point presentation ranked second with the garrett meen score of 53.78.The audio learning ranked third with a garrett mean score of 50.36.Vedio learning ranked fourth with garrett mean score of 47.44 and at least the development of Teaching skills fifth rank with garrett mean score of 43.33.

FINDINGS

- 60% of the respondents are leads this married status.
- 40% of the respondents are less this un married status.
- 64.36 of the respondents are leads this garrett mean score.
- 43.33 of the respondents are less this garrett mean score.

CONCLUSION

From the above discussion we conclude that e-learning is an innovative technique or a form of ICT[Information and Communication Technology]used in providing learning experiences to the students online through the use of internet services and web technology of computers on the same lines as witnessed by us in the form of e-mail,e-banking,e-booking and e-commerce in our day-to-day life.E-learning is also having some disadvantages which are discussed earlier.

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Use of Multimedia and Animation in Teaching

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Introduction

The paper presents a comprehensive study of selected papers that are pertinent to the use of Multimedia in Education, as well as lists down the various proposed multi-disciplinary educational frameworks and tools for the same. In this paper, a study of most commonly used methods and issues related to the use of Multimedia as a new education technology tool has been carried out and reported. It also presents a categorized listing of such papers, accompanied by annotations that describe the content of the papers and their relevance to the use of Multimedia in Education.

Objectives of multimedia & animation

1. Students have developed knowledge and competence in the application of separate multimedia technologies; they were able to work up demanded pieces of work (texts, an animated picture, sound, and so forth)
2. Students were able to exercise gained skills repeatedly, eventually to explain the process to their colleagues.
3. Particular areas students had been dealing with in the lessons (work with pictures, sound, video) were perceived by them separately, they were not able to combine their discrete skills and create a compact final multimedia piece of work (presentation).
4. Students 4. Students created a lot of small works of no further use.
5. put together useful materials – background pictures, animated pictures, etc.,
6. Finally students created their own animation work.

Review of literature

Armbruster(1998)¹, in his book titled “One way to bring about a change of emphasis in teaching, from the teacher directed approach to a facilitated approach, is to change the medium of instruction”. Interactive multimedia offers an alternative medium of instruction to the current learning process. The nature of interactivity and discovery in multimedia learning bears a beneficial boost to the monotony of passive learning. Rather than be bounded by the pace of the teacher, learners are individually paced according to his or her own ability. One way, multimedia can give low ability students extensive learning time before moving forward

Bandura(2000)², in his journals titled “The effectiveness of multimedia software to teach Geometry in the second grade of preparatory schools” explained that aimed at identifying to what extent multimedia software helps in the academic achievement of the preparatory school students in the subject of Geometry and its remembrance. The sample of experimental study included 300 male and female students divided into two experimental and control groups each group consisted of 150 male and female students.

Bandura , , A. and Schunk , (2005)³ in his articles “The effectiveness of multimedia software to teach Geometry in the second grade of preparatory schools” discusses that, aims to identify the effectiveness of a program using multimedia bags to develop some necessary educational competencies whose number is 41 educational competencies of the mathematics head teacher in the high school in the Arab Republic of Egypt. The experiment has been conducted on one experimental group consisting of 30 resident mathematics head teacher. The academic achievement test has been conducted on the students before and after the test. The study results showed significant statistical differences between pre and post tests in favor of post test.

Ghazzawi(2005)⁴ in this book “The computerized software design, its effects and the effect of the movement variable on the academic achievement of 6th grade primary school students concerning some concepts of pilgrimage”. argue that aims to design educational software according to recognized standards and to study its effects and the effect of the movement variable and gender on

the academic achievement of 6th grade primary school students concerning some concepts of pilgrimage in Jordan.

Multimedia meaning:

Multimedia is a melody sung in harmony with multi-channel and multi-modal bits of knowledge and creation. Sometimes it is as small as a rotating globe used as logo in an amateurs website or is as huge as Xbox 360 games or DreamWorks . Its ultimate role is to inform, educate and/or entertain all. Multimedia is all-pervading, thrilling and involving method of info-edu-trainmen with multiple facets and long lasting approbation.

Multimedia steps:

1. Educational Technology Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources. It is most simply and contentedly defined as an assortment of tools that might prove helpful in student centered learning, problem based learning or case-based learning. It advocates the teacher becoming "Guide on the Side" rather than "Sage on the Stage" . Educational Technology also called Learning Technology, mainly comprise of the use of technology in the process of teaching and learning. Here the term Technology does not only include the use of latest tools and techniques like laptops, interactive whiteboards, and smart phones internet, Wi-Fi, and YouTube etc., although they are massively preferred by today's learners for their learning potential, but also encompasses efficient and enhanced learning management systems, schema of information dissemination, effective teaching and management of student masses, feedback mechanisms and performance evaluation methodologies etc.

2. Multimedia Learning Environment Multimedia provides a technology based constructivist learning environment . where students are able to solve a problem by means of self explorations, collaboration and active participation. Simulations, models and media rich study materials like still and animated graphics, video and audio integrated in a structured manner facilitate the learning of new knowledge much more effectively. The interactive nature of multimedia provides the room to enhance traditional "chalk-and-talk" method of teaching [4] with more flexibility to learners to adapt to individual learning strategy. It enables both the educators and learners to work together in an informal setting. The role of educators and learners are extended. Furthermore, it encourages and enhances peer learning as well as individual creativity and innovation.

Multimedia and its pedagogical strengths

Multimedia facilitates mastering basic skills of a student by means of drill and practice. It helps in problem solving by means of learning by doing, understanding abstract concepts, provide enhanced access for teachers and students in remote locations, facilitate individualized and cooperative learning, helps in management and administration of classroom activities and learning content, and simulate real life problem handling environments. Multimedia Technology is used and experimented by various educational institutions of all levels all over the world in their own designed modes. and their relevance to the use of Multimedia in Education.

Collection of data

The primary data have been collected directly from the challenges in innovation marketing through on questionnaire. Secondary data have been collected from books, article, magazines.

- **Primary data**

The study mainly based upon the primary data. Interview schedule method is use to collect the data from the respondents. sample size of 50 respondents have been appended in the research report.

- **Secondary data**

To substantiate and to support the primary data required particular have been gathered by referring the reputed journals, magazines, standard news paper and book. some of the information have been gathered from authorized web source.

Multimedia in education:

universities approach There are two ways, multimedia education is imparted to the students by various universities / institutions:

- a)Teaching methodologies of multimedia content creation, which include imparting hands-on skills of software packages used for creation and authoring of multimedia content
- b) Employing interactive multimedia content and technology for effective teaching, which include the various methods of engaged learning like multimodal interactive information delivery; and personalized and enhanced anytime-anywhere access of the content.

Table-1
Qualifiation wise classification of table

S.no	Qualifiation	No.of respondent	percentage
1	Illiterate	5	2.5%
2	12 th	2	1%
3	Ug	10	5%
4	Pg	15	7.5%
5	m.phil	12	6%
6	Proffessional	16	8%
	Total	50	100

Soures:primary data

The above table out of 50 respondents , 8% of respondents are professional following that 7.5% of respondents are pg student, that 6% of respondents of m.phil student,5% of respondents ug student,2.5% of illiterate people of respondents.and the last 1% of respondents 12th student.

Table-2
Multimedia and its pedagogical strengths

S.NO	Statement	Sa	A	No	DA	SDA	Total
1	Educational technology	12	10	2	18	8	50
2	multimedia	15	12	4	10	9	50
3	Multi disciplinary	2	11	5	10	3	50
4	Pedagogical	15	25	3	3	4	50
5	Learning empowerment	25	13	2	4	6	50

Source:computed data

Table-3
Multimedia and its pedagogical strengths

S.no	STATEMENT	SA	AGREE	NO	DA	SDA	TOTAL
1	Educational technology	60	40	6	36	8	150
2	multimedia	75	48	12	20	9	164
3	Multi-disciplinary	105	44	15	20	3	187
4	Pedagogy	75	100	9	6	4	194
5	learning environment	125	52	6	8	6	197

Table-4
Multimedia and its pedagogical strengths

S.no	statement	total	Rank
1	Educational technology	150	V
2	multimedia	164	IV
3	Multi-disciplinary	187	III
4	Pedagogy	194	II
5	learning environment	197	I

Inferences:

The above table show that the learning environment is ranked first with Garrett mean score of 197, next the table show that the pedagogy second rank with garrett mean score of 194, then the table show that the multi-disciplinary ranked third with garrett mean score of 187, then the table show that the multimedia ranked fourth with garrett mean score of 164 and last atleast education technology ranked fifth with garrett mean score of 150.

Conclusion

A study has been carried out to analyze the reverence of multimedia in various disciplines of current education system. From the review of literature in reference with a variety of university approaches, it has been learnt that multimedia has enormous potential to impart flexible, multi-modal, life-long education to heterogeneous mass learners. The Multi-disciplinary nature of multimedia makes it increasingly popular among people from diverse domains. The literature study clearly demonstrates its qualifications as a vast source of customized learning environments, to accommodate varied behavioral problems like confidence building and stress reduction. Multimedia used in right direction has also succeeded in psychomotor development and strengthening of visual processing of the intended users. In conjunction with the study of usefulness of multimedia in different educational scenarios, the important point for future research is that the time to come will surely promise the availability of multimedia technology to one and all, but its usage should be limited to and in consideration with its pedagogical strengths. The above studies have clearly indicated that even if the networked classroom technology is made available to the students, there were many other pedagogical issues because of which the students' interest and interaction in the class room could not be increased. More research work is required in the area of multimedia pedagogy so that the design, form and content of Multimedia is such that it does not hinder the usual educational process and supplements it with more info-edu-tainment.

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A Study On Adventure Of Modern Teaching Strategies With Special Reference To Tirunelveli City A.ESAKKIYAMMAL

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INTRODUCTION:

Education is a light that shows the mankind the right direction to surge. The purpose of education is not just making a student literate but adds rationale thinking, Knowledge ability and self sufficiency. When there is a willingness to change, there is hope for progress in any field. Creativity can be developed and innovation benefits both students and teachers. Like many other industries, higher education has been forced to adapt to a new reality. Institutions of higher education, particularly public institutions, are increasingly being held accountable not just for the inputs to the education process, but for ensuring that students have attained the required educational outcomes.

The Federal Department of Education, major regional accrediting groups, and discipline-specific specialty a creditors are increasingly requiring that colleges and universities document not only learning processes, but that they also document and measure student learning outcomes. Institutions of higher education must show that they have added value in the student's educational career by documenting a change in skill level from the beginning to the end of the student's tenure at the university. The traditional model of academia which was characterized by the lecture-testing loop is being replaced by a more student-focused classroom that focuses on learning.

Objectives:

- To create quality of teaching and improve students' learning.
- To understand of the learner centered methods and encourage their implementation.
- To Help students establish short term, self referenced goals.
- To create paperless and pen less classroom.
- To analyze the adventure of modern teaching strategies
- To Offer suggestions to modern teaching would be highly effective.

Review of Literature:

- Agnew, P. W., Keller man, A. S. & Meyer, J. (1996), In their book titled "Multimedia Classroom" explained that Multimedia, is the combination of various digital types such as text, images, audio and video, into an integrated multi-sensory interactive application or presentation to convey information to an audience.
- Bound, D. & Fealty, G. (1999). In their book titled "The Challenge of Problem-Based Learning" explained that, Measuring teaching and learning at the classroom level is a key component to ensure continuous improvement of educational outcomes, However teaching and learning are very difficult concepts.
- Janssen, D. H., Peck, K. L., and Wilson, B. G. (1999). In his book titled " Learning With Technology" Change in instructional techniques is as difficult as change in any workplace situation Common barriers to instructional change include the powerful influence of educational tradition, faculty self-perceptions and self-definition of roles, the discomfort and anxiety that change creates, and the limited incentives for faculty to change.

Importance of Education:

Islam attaches such great importance to knowledge and education. When the Qur'an began to be revealed, the first word of its first verse was 'Ire' that is, read. Education is thus the starting point of every human activity. A scholar (alum) is accorded great respect in the habit. According to a habit the ink of the pen of a scholar is more precious than the blood of a martyr. The reason being that martyr is engaged in defense work while an alum (scholar) builds individuals and nations along positive lines. In this way he bestows a real life to the world. **"Education is the manifestation of perfection already in man."** –(Swami Vivekananda).

Education is a light that shows the mankind the right direction to surge. If education fails to inculcate self-discipline and commitment to achieve in the minds of student, it is not their fault. We have to convert education into a sport and learning process has to generate interest in the students and

motivate them to stay back in the institution than to run away from it. Education should become a fun and thrill to them rather than burden and boredom. It is an integral part of their growth and helps them become good citizens. Education is an engine for the growth and progress of any society. It not only imparts knowledge, skills and inculcates values, but is also responsible for building human capital which breeds, drives and sets technological innovation and economic growth. In today's era, information and knowledge stand out as very important and critical input for growth and survival. Rather than looking at education simply as a means of achieving social upliftment, the society must view education also as an engine of advancement in an information era propelled by its wheels of knowledge and research leading to development.

METHODOLOGY

Methodology

The type of research used for study is empirical and Descriptive research. It includes facts, findings and enquiries of different kind. The major purpose of descriptive research is description of the state of affairs as it exists at present.

1. Primary Data

Data collected by the researcher through Questionnaire is called primary data. Primary data is obtained through questionnaire, observation, direct communication with respondents and personal interviews.

2. Secondary Data

Secondary data are those which have already been collected by someone else and which have already been passed through statistical process. The secondary data were collected from following source. Ex: Journal ,books, Published theories, Newspaper proceeding.

Statistical Tool Used:

- Percentage analysis
- Hypothesis Analysis
- Rank Test

Traditional Teaching Method – An evaluation

In the pre-technology education context, the teacher is the sender or the source, the educational material is the information or message, and the student is the receiver of the information. In terms of the delivery medium, the educator can deliver the message via the “chalk-and- talk” method and overhead projector (OHP) transparencies. Teachers often continuously talk for an hour without knowing students response and feedback.

- The material presented is only based on lecturer notes and textbooks.
- Teaching and learning are concentrated on “plug and play” method rather than practical aspects.
- The handwriting of the lecturer decides the fate of the subject.
- There is insufficient interaction with students in classroom.
- More emphasis has been given on theory without any practical and real life time situations.
- Learning from memorization but not understanding.

Marks rather than result oriented.

Modern Teaching Methods Manual

Authors of this manual define **modern teaching methods** (MTM) as a variety of learner centered approaches that promote literacy and development of life skills such a communication skills, lifelong learning skills and critical thinking skills. The content of the manual also considers the culture and indigenous knowledge of the Ethiopian society.

The specific methods included in the manual are:

- Active learning methods (such as brainstorming, clustering, rotating review, etc.)
- Techniques of assessment and evaluation (such as peer assessment, self-assessment, etc.)
- Portfolio development
- Lesson planning
- Various games and refreshers

The manual contains numerous hand-outs which further explain the theoretical basis of the methodology and explain each method and activity in detail. multimedia features used for

instructional purposes. In this article the effects of (a) screen design, (b) learner control and navigation, (c) use of feedback (d) student interactivity, and (e) video and audio elements on the development of educationally effective multimedia modules are examined.

As electronic information technologies are being transformed from expensive, exotic gadgets into standard classroom equipment their extraordinary multimedia capabilities are rapidly becoming a routine part of many learning environments. The old text based approach to learning is being superseded by an approach which combines audio and color video in a much more exciting way (Barker & Tucker, 1990). Interactive multimedia is one of the most promising technologies of the time and has the potential to revolutionize the way we work, learn and communicate.

learning

Learning is a process of connecting “old” with “new” in our minds in a meaningful way. Learning is not the memorization of uncomprehended facts. Rather, it is the building of cognitive structures in which each fact, each piece of knowledge, each experience has its own place and is interconnected with the rest of the structure. If this occurs, learners are more likely to understand the content and also to use the learnt knowledge in their everyday lives. Also, the information is remembered better if it is gained through an active learning process that enables the learners to build their own knowledge structures.

Principles of the training

- Using effective methods of teaching-learning is the central focus of the training. This means that the training is based on each participants’ activities. Participants have firsthand experience with each method. Through this, participants get greater opportunities to understand and master the methods.
 - Regular and frequent reflection of what was going on is part of the training.
 - Needs and capabilities of participants are respected throughout the training. The content and pace are adjusted to suit the participants.
 - The real school situation is taken into consideration. The training incorporates different methods which can be applied in large classes with limited material resource
 - Enough time is provided for participants to think about the integration of methods into their current practice. During the training participants plan and implement the plan in their respective schools. In this way the implementation is supported.
-
- The training is based on a partner approach between the trainees and the trainer.

INNOVATIVE TOOLS

Multimedia Learning Process

I hear and I forget.

I see and I believe.

I do and I understand. - Confucius

The teacher uses multimedia to modify the contents of the material. It will help the teacher to represent in a more meaningful way, using different media elements. These media elements can be converted into digital form, modified and customized for the final presentation. By incorporating digital media elements into the project, the students are able to learn better since they use multiple sensory modalities, which would make them more motivated to pay more attention to the information presented and retain the information better.

Another advantage of creating multimedia projects in the classroom setting is that when students create multimedia projects, they tend to do this in a group environment. By working in a group, the students would have to learn to work cooperatively and collaboratively, using their group skills and a variety of activities to accomplish the project’s overall objectives.

TRADITIONAL AND MULTIMEDIA LEARNING THE DIFFERENCE

Various Multimedia Tools:

MIND MAP

Mind Maps are also very quick to review, as it is easy to refresh information in your mind just by glancing once. Mind Maps can also be effective mnemonics and remembering their shape and

structure can provide the cues necessary to remember the information within it. They engage much more of the brain in the process of assimilating and connecting facts than conventional notes. This would bring very high impact on the minds of the students about a concept

- ☐ Creates clear understanding
- ☐ PowerPoint can be used widely.
- ☐ Innovative thinking improves

TEACHING WITH SENSE OF HUMOUR – “HUMOUR AN EFFECTIVE MEDIUM OF TEACHING

Everyone loves a teacher with an infectious sense of humor. Looking at the lighter side of life not only fosters cordial relations between professors and students, but also provides welcome relief while trying to follow a difficult lecture on a complicated subject. When there is a willingness to change, there is hope for progress in any field. Teaching is a challenge. Learning is a challenge. Combining both effectively is a challenge. Being humorous is a challenge. However, laughing is easy. We are convinced both by experience and research that using humour in teaching is a very effective tool for both the teacher and student.

ANALYSIS AND INTERPRETATION

This study aims Adventure of Modern Teaching Strategies in Tirunelveli city. For this purpose the study conducted for 50 respondents of the students. An attempt has been made in this section to analysis the collected data with reference to activities of the student a detailed analysis are given below.

Table 1.
Opinion about modern and traditional Teaching

s. no	Type of Teaching	Response	Percentage	Rank
1.	Traditional	20	40	11
2.	Modern	30	60	1
Total		50	100	

Source; Computed Data.

Inferred:

The above table shows that, the majority 60% of the respondents are use Modern teaching strategies, and 40% of the respondents are use traditional strategies.

Table 2.
H₀ – There is no significance relationship between Age and preference level Teaching profession.

s.no	Age	Traditional Teaching	Computer based teaching	Multi media	Mind Map	Total
1.	10 – 20	1	2	2	1	5
2.	20 – 30	1	4	9	3	17
3.	30 – 40	2	6	5	3	16
4.	Above 40	3	1	3	4	11
	Total	6	13	20	11	50

Source: Computed data

Calculation the table value Degree of freedom

s (R-1) (c-1)

R=5, c=5

(5-1) (5-1) = 16

The table value = 4.032.

Calculated value = 6.33.

H_0 – There is significant relationship between Age and preference level .a Computed Data Since the calculated value is 6.33 Less than the table value 11.071, the null hypothesis is Accepted. It is concluded that there is no significant relationship between Age and preference level Teaching profession.

Table 3.
Opinion about which type of modern teaching method do you prefer

s.no	Teaching Method	Mean score	Rank
1	Techniques of assessment	6.3	I
2	Active Learning	6.2	II
3	Portfolio development	5.2	III
4	Various games and refreshers	4.3	IV
5	Lesson planning	3.0	V
	Total		

Source: Computed data

Inferred:

The Table 3 show that Opinion about the teaching method. Technical of assessment ranked first with the mean score of 6.3, and active learning second with the mean score of 6.2, and portfolio development is third with the mean score of 5.2. and various games and refreshers fourth ranked with the mean score of 4.3 and lesson planning is last with the mean score of 3.0.

Findings:

- 60% of the respondents are use Modern teaching strategies.
- Technical of assessment ranked first with the mean score of 6.3.
- There is no significant relationship between Age and preference level Teaching profession.
- active learning second with the mean score of 6.2.

Suggestion:

- The researchers recommend that the teaching would be highly effective if the teacher start to use the recent multimedia technologies like usage of computers extensively or some modifications in the conventional mode of teaching
- use of computers may be very well practiced in the environment where the use of such technology is highly possible, but there must be some sort of innovation which can also be practiced in an environment where such use of technology is on its way to growth.
- Z-A approach are the ideas that can very well be practiced. The researchers believe that the core objective of teaching is passing on the information or knowledge to the minds of the students.
- Using computers or modifying the existing conventional chalk-talk method are innovative if they ultimately serve the attainment of core objective of teaching.

Conclusion:

Across the world, information technology is dramatically altering the way students; faculty and staff learn and work. Internet-ready phones, handheld computers, digital cameras, and MP3 players are revolutionizing the college life. As the demand for technology continues to rise, colleges and universities are moving all sorts of student services, from laundry monitoring to snack delivery online.

Technology is also changing the classroom experience. The classrooms at New York University's Leonard N Stern School of Business feature all sorts of conveniences for students and teachers. For instance, the room is wired with cameras for photographing whiteboards, so students can receive the images as digital files. In addition, tablet PCs, compact computers that allow you to write notes directly onto the screen with a special pen, replace the archaic projector. With the tablet technology allow professors to make notes on charts and spreadsheets and send them directly to their students' PCs and he will get a feed back from each student. the role of student is more important than teachers. The concepts of paperless and penless classroom are emerging as an alternative to the old teaching learning method. Nowadays there is democratization of knowledge an the role of the teacher is changing to that of facilitator. We need to have interactive teaching and this changing role of education is inevitable with the introduction of multimedia technology and the spawning of a technologically-savvy generation of youths.

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Ict On Innovative Teaching And Learning

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INTRODUCTION

We are living in a constantly evolving digital world. ICT has an impact on nearly every aspect of our lives-from working and socializing, learning to playing. The digital age has transformed the way young people communicate, network, seek help, access information and learn. As technology becomes more and more embedded in our culture. We must provide our learners with relevant and contemporary experience that allow them to successfully engage with technology and prepare them for life after school. It is widely recognized that learners are motivated and purposefully engaged in the learning process when concepts and skills are underpinned with technology and sound pedagogy. The purpose of this paper is to report on the findings of continuing use of ICT by ICT teachers in their teaching and learning.

UNDERSTANDING THE NEED FOR CHANGE

Over the past 25 years, alongside a series of national and local programmes for the development of ICT in education. One of the most fundamental problems in education reform is that people do not have a clear and coherent sense of the reasons for educational change, what it is and how to proceed. Thus there is much superficiality, confusion, and misunderstood reform. If teachers no need to change their current professional practice they may not accept the use of ICT in their teaching.

SUPPORT FROM THE INSTITUTION

The most effective way to bring about the adoption of an innovation in school is to engage in a democratic process. All the teachers are involved in the decision to adopt ICT in the school and colleges. Individual teacher attending a course, and willing to learn from their new knowledge and skills when they return.

POSITIVE FACTORS INFLUENCING PERCEIVED EASE OF USE

The regular use of ICT, it is easy to control the inside and outside the classroom. Teaching and learning person is a ownership of a computer. Increasing the confidence level, when using ICT. Easy to think a new lesson ideas. They can get help and advice from colleagues.

USEFULNESS OF ICT

Technology plays a key role in innovative teaching. Innovative teachers use new technology to enhance or expand upon the student experience. The transition from traditional blackboard and overhead projector instruction in to computer – aided presentations was innovative. As of 2014, innovative teachers tools like tablet computers and mobile devices to offer students a more interactive experience.

A personal computer is the best known example of the use of ICT in education, but the term multimedia is also frequently used. Multimedia can be interpreted as a combination of data carriers, for example video, CD-ROM, floppy disc and internet and software in which the possibility for an interactive approach.

A primary motive of innovative teaching is encouraging students to engage more in the learning process. When students interact with teachers and peers, they gain more practical experience and retain more information from a class.

Innovative teaching also involves creativity on the part of the teacher. Innovative teachers sometimes reorganize the educational process; “Flipped class rooms” are a popular example of innovative teaching as of 2014. In a flipped classroom, the teacher offers students a conventional lecture or knowledge- building experience out of class, such as a video – taped lecture. Students then complete activities, case studies and more lab- based projects in the classroom. The teacher serves as a guide or consultant as students participate.

Learning is a social practice and can’t happen alone. “By our nature we are social beings and we learn by interacting”. We learn by pushing and pulling on concepts with one another. Group work can be good for all learners. It pushes people in different ways. Emotions are an integral part of learning. Most teachers know that if a student is upset about something that happened at home or in school, they won’t learn well. Similarly, keeping students motivated should be the starting point of learning.

Learning is equally important and that students ability to go beyond that, to question and apply learning in new situations. This is the identified principles for innovative learning. Learners have to be at the centre of what happens in the classroom with activities focused on their cognition and growth.

Learners are different and innovative learning environments reflect the various experience and prior knowledge that each student brings to class. Student really wants practice and processes that help teachers engage each student where they are. Assessments are important. It should be meaningful, substantial, and shape the learning environment itself. Good teachers do this informally most of the time. Learning needs to be connected across disciplines and reach out into the world. Learning can’t be meaningful if students don’t understand why the knowledge will be useful to them; it can be applied in life. Understanding the connections between subjects and ideas is essential for the ability to transfer skills and adapt.

Learning in schools and colleges can be enriched by experiences from everyday life; informal learning can be deepened by adding questions and knowledge from the classroom. Since learning occurs over a lifetime, drawing on experiences across multiple settings, the wider opportunity is to support learners in recording, linking, recalling and sharing their diverse learning events.

Typical cognitive aspects of learning include whether students have answered a question and how they explain their knowledge. Non-cognitive aspects include whether a student is frustrated, confused, or distracted. For classroom teaching, a promising approach is to combine computer-based systems for cognitive tutoring with the expertise if human teachers in responding to student’s emotions and dispositions, so that teaching can become more responsive to the whole learner.

STEALTH ASSESSMENT

When students work with rich digital environments can be applied to unobtrusive, ‘stealth’. Stealth assessment borrows techniques from online role-playing games such as World of War craft, in which the system continually collects data about players actions, making inferences about their goals and strategies in order to present appropriate new challenges. This idea of embedding assessment into a stimulated learning environment is now being extended to schools, in topics such as science and history, as well as to adult education.

Stealth assessment can test hard-to-measure aspects of learning such as perseverance, creativity, and strategic thinking. It can also collect information about students learning states and process without asking them to stop and take an examination. In principle, stealth assessment techniques could provide teachers with continual data on how each learner is programming.

However, much research remains to be done, both to identify the measures of student learning process that predict learning outcomes for different learning systems and to understand the amount and format of student learning data that are useful to teachers.

CONCLUSION

ICT is an innovation which can promote and foster various degrees of organizational change. The pedagogical adoption of ICT is complex and requires an integration of vision, system-wide experimentation and new roles and relationships for teachers and students. ICTs, when used in ways that make use of their affordances, are a powerful driver for change. Let us not forget that classrooms have never been ideal learning environments and teachers in public education systems have always been somewhat burdened by working with students who are there under compulsion. ICTs can help to make schools less-stressful workplaces for both teachers and students. The affordances of the Internet, digital photography and cyberspace are radically changing how knowledge is constructed, represented and accessed in the world outside school, and policy-makers need to acknowledge this and restructure the systems of curriculum, assessment and school organization that were originally developed to suit a now out-dated social order.

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E-Learning Resources in India

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Introduction:

Distance learning has been an alternative to face-to-face learning, in which instructors and students are physically separated by time, location, or both (Hodgins, 2000). As early as 100 years ago, instructional materials and student responses were delivered by the postal system, and by the late 1960s and early 1970s, significant changes resulted from development of new media technologies and delivery systems such as orbital satellite communication. Colleges and universities started to transmit educational program via satellite. In the late 1980s and the 1990s, numerous systems were launched with the primary purpose of delivering distance learning via one-way video and two-way audio communications – students at remote sites could see instructors located at a central site, but could address only through audio communication. There are, however, some disadvantages of distance education, such as lack of immediate feedback from instructors and lack of interaction. Since 1990, a dramatic shift to Internet-based learning has vastly expanded the world of open and distance learning, leading to what has been referred to as Electronic Learning (or eLearning).

Objectives of the study:

1. To increase access to learning opportunities/increase flexibility for students
2. To enhance the general quality of teaching/learning.
3. To develop the skills and competencies needed in the 21st century, and in particular to ensure that learners have the digital literacy skills required in their discipline, profession or career – or, put simply, to get work in the future
4. To meet the learning styles/needs of millennial students
5. To improve the cost-effectiveness of the post-secondary education system
6. To stay at the leading edge of educational technology developments/to digitalise all learning – or put another way, to respond to the technological imperative
7. To de-institutionalize learning/to enable self-managed learning.
8. To embark on a journey of mystery to see where it will take me.

Collection of data:

The primary data have been collected directly from the e-commerce through questioner secondary data have been collected from standard book, articles, magazines, encyclopedia and internet.

Primary data:

The study mainly based upon the primary data interview schedule method is used to collected the data from the respondent sample size to 50 percent have been appended in the research.

Secondary data:

Data required particular have been gathered by referring the reputed journals, magazines, Standard news paper and books some of the information has been gathered from authorized web some.

Review of literature:

Laurillard, D. (1993)¹ in this book title. *Teaching Technology Rethinking University: A Framework for the Effective Use of Educational "eLearning"*, explain that **Routledge** is rapidly becoming the preferred route to building and maintaining advanced performance capabilities via improved efficiencies and effectiveness.

Macdonald, R. And Wisdom, J. (Eds.). Kogan (2002)² in their book title *Research, Evaluation and Changing Practice in Higher Education*, explain that in Academic and Educational

Development, learning has vastly expanded the world of open and distance learning, leading to what has been referred to as Electronic Learning (or eLearning).

McConnell, D. (2002)³ in this article Negotiation, identity and knowledge in e-learning communities. explain that Paper presented at the Networked Learning conference so the process continues. In short, the process is an ongoing, dynamic one, and it also has to be an integrated one, in which all ecologies work.

Concept and Aspect of e-Learning:

E-learning is electronic learning, and typically this means using a computer to deliver part, or all of a course whether it's in a school, college, part of training or a full distance learning course. E-Learning is learning utilizing electronic technologies to access educational curriculum outside of a traditional While Einstein's words may have been intended in good humor, they aptly reflect the fact that effective education is constant and always evolving. In fact, the face of education has experienced a sea change over the decades. Once characterized by the traditional classroom model, education has metamorphosed into learning that is instant, online, self-driven and on the go. The journey of education in India, too, has been dotted with innumerable milestones.

Promising Uses of New Technology:

The five ways in which we suggest teachers consider using electronic resources involve tasks that you will usually have to perform in any case. New technologies can help you perform them better and more easily:

- **Administration:** The routine administration of courses (advertising a class, providing copies of the syllabus, assigning discussion sections, and getting out course news) can be more efficiently handled with a course home page, electronic discussion groups, and e-mail lists. These tools can also dramatically improve the continuity and the community aspects of courses, helping students to engage with and learn from each other and even from people outside the course.
- **Readings/sources:** The Web and CD-ROMs provide a wider variety of secondary and primary sources (including visual and audio sources) than has previously been available. With your guidance, your students can now gain access to materials that were once accessible only to experts because they were too cumbersome to reproduce for classroom use or too expensive for students to purchase. By taking their own paths through these sources, students can bring their own evidence and arguments into lectures and discussion sections, as well as write on a wider range of research topics.
- **Papers/presentations:** Rather than performing assignments and taking exams from the teacher alone, students can perform more independent exercises in publishing, exhibit building, or assembling and presenting teaching units and other materials for their peers. A web archive of several terms' work can make the course itself an ongoing and collaborative intellectual construction.
- **Lectures:** A computer with presentation software can provide a single tool for augmenting lectures with outlines, slides, statistical charts and tables, images, music, and even video clips. In addition to printing them as handouts, you can save in-class presentations in a web-compatible format for later review and discussion.
- **Discussion:** Electronic discussion tools such as e-mail, conferencing software, and on-line chat services can seed discussion questions before the class meets, draw out your shy students, and follow up on discussions or questions on the reading between classes. For courses without face-to-face discussion sections, these tools can bring the course to life over great distances and help overcome scheduling difficulties.

- **Advantages of E-learning:**

Some of the advantages that the adoption of e-learning in education, obtained from review of literature includes the following:

1. It is flexible when issues of time and place are taken into consideration. Every student has the luxury of choosing the place and time that suits, the adoption of e-learning provides the institutions as well as their students or learners the much flexibility of time and place of delivery or receipt of according to learning information.
2. E-learning enhances the efficacy of knowledge and qualifications via ease of access to a huge amount of information.
3. It is able to provide opportunities for relations between learners by the use of discussion forums. Through this, e-learning helps eliminate barriers that have the potential of hindering participation including the fear of talking to other learners. E-learning motivates students to interact with other, as well as exchange and respect different point of views. E-learning eases communication and also improves the relationships that sustain learning. E-learning makes available extra prospects for interactivity between students and teachers during content delivery.
4. E-learning is cost effective in the sense that there is no need for the students or learners to travel. It is also cost effective in the sense that it offers opportunities for learning for maximum number of learners with no need for many buildings.
5. E-learning always takes into consideration the individual learners differences. Some learners, for instance prefer to concentrate on certain parts of the course, while others are prepared to review the entire course.

Role of e- learning:

“In well facilitated learning environments, through technology, students become excited about what they are learning and aware that they are members of a global community (Berge, 1998). It is the powerful tool for distance education which is marking its presence across school, universities and organizations. These are due to the inherent advantages of the technology. Some of these are:

- The number of students aspiring for education is becoming larger day by day, making it impossible to develop the traditional infrastructure (classrooms, physical libraries, hostels) to cater to the ever growing need. Developing online systems can help meet these growing demands.
- Due to the larger workforce requirement as guided by the industrial revolution, professionals are lured towards the attractive and soaring incentives to join the race, thus posing a threat to the education industry in terms of dearth of qualified, experienced and competent faculties, experts and the trained professionals. Developing online systems can help the industry by providing new development avenues to the professionals and sustaining their enthusiasm.
- Online Systems will also enable the efficient use of resources anytime and in any part of the country. Thus making the whole education system altogether flexible.
- Also, such systems will enrich the learning process which will enhance the entire learning experience.

Tools of E-learning:

In e-learning method several kinds of tools are used apart from internet, intranet and network tools such as:

- **Blogging Tools:**

A blog is made in journal style and usually displayed in reverse chronological order. It spread and enables access to specific information it can be used by students as well as instructor to provide updated information.

- **E-mail:**

E-mails as well as email based discussion forums are useful in delivering contents as well as communication about e-learning.

- **News group:**

A user can read and post message to central space which then copies it to individual and other news group. Bulletin Boards:-Bulletin board is a public discussion area where messages can be sent electronically without sending them to anyone's e-mail and these messages could be read by anyone who enters that area.

- **Web forms:**

Web forms are used as a means for providing references service to the users in e-learning environment discussion under various topics but not in real time.

- **Polling:**

Polling enables us to setup a survey /questionnaire and obtain feedback from a wide range of people.

- **Wikis:**

Wiki is a set of web pages that can be easily updated by anyone who is allowed access.

- **Instant Messaging:**

Instant Messaging is the real time communication between two more people based on typed text. It is used for multiple purposes such as simple request & responses; scheduling face to face meetings etc.

- **Online discussion:**

Online discussion allow users to post messages to a known location where other participant can read and respond to them, while video conferencing tools let the user see and hear one another .

- **White board:**

It stimulates the communication that occurs when instructor draws on a wall mounted white board & then invites a student to contribute to drawing.

- **Course Management System:**

This system help in the creation and management of course material such as lesson/course ware assignments glossaries, citation to the other recourses etc. also known as virtual learning system, learning management system etc.

- **Internet telephony:**

In this tool a user can make calls by using internet. An individual can make distance phone calls through the computer and the internet without playing long distance phone charges.

Formal and Informal e-Learning:

Some forms of e-learning – online education and online training recreate the formal learning experience online. Online education provides adults with limited literacy skills with a safe and patient place to develop basic skills such as reading and mathematical skills. The only factor that separates online training from education is that the skills and knowledge taught via training are expected to be used immediately. E-learning allows us to explore the potential of informal learning such as Knowledge Management and Electronic Performance Support. Knowledge Management is basically recorded pieces of corporate information such as policies, procedures and product information documents, reports, presentations and proposals expertise, often recorded in the form of documents like lessons learned, stories and case histories and online interaction with colleagues and can also include online chats, discussions and symposia during which participants can exchange information not yet been recorded.

Analysis and interpretation of data:

Table: 1

Analysis the education of table

S.NO	Particular	respondent	percentage
1	Elementary	2	4
2	Primary	8	16
3	secondary	15	30
4	Higher secondary	5	10
5	UG	3	6
6	NIL	17	34
		50	100

34% of the person are illiterate and 30% of the person have completed upon secondary level education it is noticeable that only 6% of the respondents are graduate.

Table: 2

Analysis on e-learning and hybrid teaching

Sources	Total	Rank
Online learning	145	5
Persona list learning	217	1
Distant learning	150	3.5
Learning Ability	173	2
New Technology	150	3.5

Source: Primary Data

The above table revealed that persona list learning ranked first with Garrett mean score of 217, learning ability ranked second with the Garrett mean score of 173, distant learning and new technology with the third same the Garrett mean score of 150, online leaning ranked fifth with the Garrett mean score of 145.

Conclusion:

We consider that the success or otherwise of programmers that use e-learning to support adults wanting to develop their LLN skills can best be predicted by considering these ecologies from within an evolutionary framework (Davis, 2009). Davis describes ecologies of people in and around the classroom who all contribute to the success of learning. The e-learning that takes place is supported by four tiers: bureaucratic entities, such as the Tertiary Education Commission; commercial interests, including telecom companies; professionals in tutor-training organizations and professional

societies; and political agents at all levels of society, from the local community to the international stage. Amidst this framework, tutors are the key players: they are the essential individuals who keep the edifice functioning. This evolutionary framework recognizes that ecologies change as people adapt their behavior, whether individually or in groups, in accordance with new understandings and ways of doing things. Such change leads to changes in organizational structures and procedures, and those changes, in turn, lead to more change among the individuals who work within the organization or access its learning provisions. And so the process continues. In short, the process is an ongoing, dynamic one, and it also has to be an integrated one, in which all ecologies work well together.

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A study on e-learning in India

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Introduction:

E- Learning is defined as an acquisition of knowledge and skills using electronic technologies such as computer, internet based courseware and local and wide area network. E-learning is a way of providing training and development to the employees through various electronic media such as internet, audio, video. In a society, the student generations have to realize the importance of technology and have to be well aware how to teach the future leaders. Annually, the demand for higher education is growing globally and India is no exception to it. In fact, in India, the number of applicants is three to five times as against the number of seats in any institution of higher education. It can be also defined as an “Internet based Training (IBT)”.

Objectives of the study:

1. To know the innovative shift in the field of learning, providing rapid access to specific knowledge and information.
2. To find out the background on the Distance Education.
3. To analysis the need of e-learning systems and environment.
4. To find out the organizations to transcend distance and other organizational gaps by providing a cohesive virtual learning environment.
5. To observe summarizes several opinions regarding the comparison between traditional learning, classroom learning and e-learning.

Collection of Data:

The primary data have been collected directly from the e-learning through on Questionnaire. Secondary data have been collected from standard books, articles, magazines, encyclopedia and internet.

- **Primary Data:**

The study mainly based upon the primary data. Interview schedule method is used to collect the data from the respondents. Sample sizes of 50 respondents have been appended in the research report.

- **Secondary Data:**

To substantiate and to support the primary data required particular have been gathered by referring the reputed journals, magazines, standard newspaper and book. Some of the information has been gathered from authorized web source.

Review of literature:

Liaw and Huang (2003)¹ in their book titled “e-learning” discussed that e-learning based on the summaries of its characteristics. In the first place, they propose a multimedia environment. Secondly, they incorporate several kinds of information. Thirdly e-learning systems support collaborative communication, whereby users have total control over their own situations of learning. In the fourth place, e-learning support networks for accessing information. And fifth, e-learning allows for the systems to be implemented freely on various kinds of computer operating systems.

Maltz et al (2005)², in his book titled “e-learning Resources” explained that e-learning is applied in different perspectives, including distributed learning, online-distance learning, as well as hybrid learning. E-learning, is the use of information and communication technologies in diverse processes of education to support and enhance learning in institutions of higher education, and

includes the usage of information and communication technology as a complement to traditional classrooms, online learning or mixing the two modes.

Tao et al (2006)³, in his paper titled “e-learning process” reported that new environment for learning that is centered on electronic networks has allowed learners in universities to receive individualized support and also to have learning schedules that is more suitable to them as well as separate from other learners. This facilitates a high interaction and collaboration level between instructors or teachers and peers than traditional environment for learning. E-learning in academics which is characterized by the use of multimedia constructs made the process of learning more active, interesting and enjoyable.

Abbad et al (2009)⁴, in his journal titled “E-learning” discussed that E-learning to mean any learning that is enabled electronically. They however narrowed this definition down to mean learning that is empowered by the use of digital technologies. This definition is further narrowed by some researchers as any learning that is internet-enabled or web-based.

The use of e-learning in India:

The development of multimedia and information technologies, as well as the use internet as a new technique of teaching, has made radical changes in the traditional process of teaching. Development in information technology has generated more choices for today’s education. Agendas of schools and educational institutions have recognized e-learning as having the prospect to transform people, knowledge, skills and performance colleges, universities, and other institutions of higher learning race to advance online course capability in a speedily developing cyber education market. E-learning, has come to be more and more important in institutions of higher education. The introduction and expansion of a range of e-learning tools has been initiating several changes in higher education institutions, particularly when it comes to their educational delivery and support processes.

Scope of e-learning:

There are basically two parts or phases of e-learning. In one phase e-learning is used for educational purpose and at other level it is been used for training. The educational use is limited to secondary and higher secondary level. In the second phase it is used to provide training to the employees and to upgrade their skills. E-learning is growing at very low rate in India as compared to international market where it is been used at all levels. In India if we can be able to make e-learning as a source of learning in rural areas then it is the easiest and fastest tool to educate people. If we consider the population in India it is hard to accommodate all the people in specific university or educational area gets the education

Challenges of e-learning in India:

In case of India majority of population is leaving in rural areas so it is bit difficult to make them aware about the concept of e-learning. The second problem is to make it available to the rural areas. The problem of infrastructure, connectivity and internet availability are also there. The life style of people also affect for all this. We can take these measures to implement the concept of e-learning in rural area where we will be having full utilizations of the system. The social implication of e-learning can be very important issue to be considered for the success of e-learning in India. The social implication consists of religion, gender, literacy, geographical area, literacy, lifestyle etc. If we consider cultural issues the following factors matters which includes content, style of writing , material used and style of utilization. Some contents may be favorable or unfavorable to the to some group of people, so we need to take care of this .

Advantages or Benefits of E-learning:

Some of the advantages that the adoption of e-learning in education, obtained from review of literature includes the following:

6. It is flexible when issues of time and place are taken into consideration. Every student has the luxury of choosing the place and time that suits, the adoption of e-learning provides the institutions as well as their students or learners the much flexibility of time and place of delivery or receipt of according to learning information.
7. E-learning enhances the efficacy of knowledge and qualifications via ease of access to a huge amount of information.
8. It is able to provide opportunities for relations between learners by the use of discussion forums. Through this, e-learning helps eliminate barriers that have the potential of hindering participation including the fear of talking to other learners. E-learning motivates students to interact with other, as well as exchange and respect different point of views. E-learning eases communication and also improves the relationships that sustain learning. E-learning makes available extra prospects for interactivity between students and teachers during content delivery.
9. E-learning is cost effective in the sense that there is no need for the students or learners to travel. It is also cost effective in the sense that it offers opportunities for learning for maximum number of learners with no need for many buildings.
10. E-learning always takes into consideration the individual learners differences. Some learners, for instance prefer to concentrate on certain parts of the course, while others are prepared to review the entire course.

Disadvantages of E-learning:

E-learning, in spite of the advantages that it has when adopted in education, also has some disadvantages. The disadvantages of e-learning that have been given by studies include the following:

1. E-learning as a method of education makes the learners undergo contemplation, remoteness, as well as lack of interaction or relation. It therefore requires a very strong inspiration as well as skills with to the management of time in order to reduce such effects.
2. With respect to clarifications, offer of explanations, as well as interpretations, the e-learning method might be less effective that the traditional method of learning. The learning process is much easier with the use of the face to face encounter with the instructors or teachers.
3. When it comes to improvement in communication skills of learners, e-learning as a method might have a negative effect. The learners though might have an excellent knowledge in academics they may not possess the needed skills to deliver their acquired knowledge to others.
4. Since tests for assessments in e-learning are possibly done with the use of proxy, it will be difficult, if not impossible to control or regulate bad activities like cheating.
5. E-learning may also probably be misled to piracy and plagiarism, predisposed by inadequate selection skills, as well as the ease of copy and paste.

The future of e-learning:

E-learning is here to stay. As computer ownership grows across the globe e-learning becomes increasingly viable and accessible. Internet connection speeds are increasing, and with that, opportunities for more multimedia training methods arise. With the immense improvement of mobile networks in the past few years and the increase in telecommuting, taking all the awesome features of e-learning on the road is a reality with smart phones and other portable devices. Technologies such as social media are also transforming education constantly.

Generally speaking, learning is expensive, takes a long time and the results can vary. E-learning has been trying for years now to complement the way we learn to make it more effective and measurable. The result now being that there are a number of tools that help create interactive courses, standardize the learning process and/or inject informal elements to otherwise formal learning processes. Several e-learning trends give us a view to how e-learning and learning tools will be shaped in the future:

- **Micro-learning:**

Micro-learning focuses on the design of micro learning activities through micro-steps in digital media environments, which already is a daily reality for today's knowledge workers. These activities can be incorporated into a learner's daily routines. Unlike "traditional" e-learning approaches, micro-learning often trends towards push technology through push media, which reduces the cognitive load on the learners. Therefore, the selection of micro-learning objects and also place and timing of micro-learning activities are of importance for didactical designs. Micro-learning is an important paradigm shift that avoids the need to have separate learning sessions since the learning process is embedded in the daily routine of the end-user. It is also perfectly suited for mobile devices where long courses can be overkill.

- **Personalized Learning:**

Personalized Learning is the tailoring of pedagogy, curriculum and learning environments to meet the needs and aspirations of individual learners. Personalization is broader than just individualization or differentiation in that it affords the learner a degree of choice about what is learned, when it is learned and how it is learned. This may not indicate unlimited choice since learners will still have targets to be met. However, it may provide learners the opportunity to learn in ways that suit their individual learning styles and multiple intelligences.

- **The distant future:**

Automatic learning in a well-known scene from the movie lies down in a high-tech dentist's chair and straps on a wild array of electrodes, downloading a series of martial arts training programs into his brain. Afterward, he opens his eyes and speaks the words geeks have been quoting ever since: "I know Kung Fu."

Analysis and Interpretation of Data:

Table: 1

Percentage Analysis Analysis on age of the respondents

S.No.	Age	No. of Respondents	Percentage
1	25 or Below	16	32
2	26-35 years	12	24
3	36-45 years	8	16
4	46-55 years	9	18
5	56-65 years	5	10
6	Above 65 years	0	0
Total		50	100

Source: computed Data

The above table shows that out of 50 respondents 32 percent of the respondents belong to the age group between 25 or below, 24 percent of the respondents belongs to the age group between 26-35 years, 16,18,10 percent of the respondents belongs to the age group between 36-45 years, 46-55 years, 56-65 years and above 65 years is no respondents.

Table: 2

Garrett Ranking Test
Analysis on advantages of E-Learning

Advantages	Garrett mean	Garrett Score
Learning ability	43.12	VI
Mobility impairment	46.17	IV
Availability of online course notes	59.23	I
Saves time	55.14	II
Makes classes more interesting and stimulating	49.56	III
Learn more about technology	41.32	VII
Less materials to transport	45.16	V

Sources: computed Data

The above table shows that out of 50 respondents the availability of online course notes ranked first with the Garrett mean score of 59.23, next saves time ranked second with the Garrett mean score of 55.14, the makes classes more interesting and stimulating ranked third with the Garrett mean score of 49.56, the mobility impairment ranked third with the Garrett mean score of 46.17, less materials to transport ranked fifth with the Garrett mean score of 45.16, the learning ability ranked sixth with the Garrett mean score of 43.12, and at least the learn more about technology ranked seventh with the Garrett mean score of 41.32.

Findings:

1. The most of the respondents are belongs to the age group between 25 and below.
2. The most of the respondents are belongs to the availability of online course note.
3. Very less proportion of the respondents is known learn more about technology.
4. The presents study is about e-learning in India (electronic learning in India).
5. Very less proportion of the respondents were to the above 65 years.

Conclusions:

E-learning involves the use of digital tools for teaching and learning. It makes use of technological tools to enable learners study anytime and anywhere. It involves the training, delivery of knowledge and motivates students to interact with each other, as well as exchange and respect different point of views. It eases communication and improves the relationships that sustain learning. Despite some challenges discussed, the literature has sought to explain the role of e-learning in particular and how eLearning has made a strong impact in teaching and learning. Its adoption in some institutions has increased faculty and learner's access to information and has provided a rich environment for collaboration among students which have improved academic standards. The overall literature which explains the advantages and disadvantages of e-learning suggests the need for its implementation in higher education for faculty, administrators and students to enjoy the full benefits that come with its adoption and implementation.

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Web Resources: www.google.com www.forbes.com www.teaching.net

Need and Realization of Digital library

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1. Introduction:

A digital library is a special library with a focused collection of digital objects that can include text, visual material, audio material, video material, stored as electronic media formats, along with means for organizing, storing, and retrieving the files and media contained in the library collection. Digital libraries can vary immensely in size and scope, and can be maintained by individuals, organizations, institutions and academic institutions. The digital content may be stored locally, or accessed remotely via computer networks. An electronic library is a type of information retrieval system. The first use of the term digital library in print may have been in a 1988 report to the Corporation for National Research Initiatives [3] The term digital libraries was first popularized by the NSF/DARPA/NASA Digital Libraries Initiative in 1994[4]. These draw heavily on “As We May Think” by Vannevar Bush in 1945, which set out a vision not in terms of technology, but user experience. The term virtual library was initially used interchangeably with digital library, but is now primarily used for libraries that are virtual in other senses. A distinction is often made between content that was created in a digital format, known as born-digital, and information that has been converted from a physical medium, e.g., paper, by digitizing. The term hybrid library is sometimes used for libraries that have both physical collections and digital collections. For example, American Memory is a digital library within the Library of Congress. We are in the age of a networked society where information technology in addition to its use in all spheres of human activity has been used extensively to record, store, and disseminate the information in the digital form. Information technology has almost converted the world into a global village. The revolution in the information technology sector is influencing medical information and information. Libraries are also changing to meet the demand put on them. The new generation whose demand for information is never met is always demanding that traditional libraries should be developed as a well equipped and interconnected as digital libraries.

2. Digital library:

According to Arms a digital library is a managed collection of information with associated services where the information is stored in digital format and accessible over a network. A digital library is an organized collection of digitized material or its holding in the digital form, which can be accessible by a computer on the network by using TCP/IP or other protocol. Digital library is a later stage of electronic library. In digital library high speed optical fiber are used for LAN and the access is over WAN and provide a wide range of Internet based services i.e. audio and video conferencing and like other. The majority of the holding of a digital library is in the computer readable form and also acts as a point of access to other on line sources.

2.1. Types of Digital libraries:

Stand-alone Digital Library (SDL): This is the regular classical library implemented in a fully computerized fashion. SDL is simply a library in which the holdings are digital (i.e., electronic – scanned or digitized). The SDL is self contained – the material is localized and centralized. In fact, it is a computerized instance of the classical library with the benefits of computerization. Examples of SDLs are the Library of Congress (LC)

Federated Digital Library (FDL): This is a federation of several independent SDLs in the network, organized around a common theme, and coupled together on the network. A FDL composes several

autonomous SDLs that form a networked library with a transparent user interface. The different SDLs are heterogeneous and are connected via communication networks. The major challenge in the construction and maintenance of a FDL is interoperability (since the different repositories use different metadata formats and standards). Examples of FDLs are the Networked Computer Science Technical Reference Library (NCSTRL) and Networked Digital Library of Theses and Dissertations (NDLTD).

Harvested Digital Library (HDL): This is a virtual library providing summarized access to related material scattered over the network. A HDL holds only metadata with pointers to the holdings that are “one click away” in Cyberspace. The material held in the libraries is harvested (converted into summaries) according to the definition of an Information Specialist (IS). However, a HDL has regular DL characteristics, it is finely grained and subject focused. It has rich library services, and has high quality control preserved by the IS, who is also responsible for annotating the objects in the library. Examples of HDLs are the Internet Public Library (IPL).

2.2. Digital and Traditional libraries:

The shift from traditional libraries to the digital is not merely a technological evolution, but requires a change in the paradigm by which people access and interact with information. A traditional library is characterized by the following:

- emphasis on storage and preservation of physical items, particularly books and periodicals
- cataloging at a high level rather than one of detail, e.g., author and subject indexes as opposed to full text
- browsing based on physical proximity of related materials, e.g., books on sociology are near one another on the shelves
- passivity; information is physically assembled in one place; users must travel to the library to learn what is there and make use of it

By contrast, a digital library differs from the above in the following ways:

- emphasis on access to digitized materials wherever they may be located, with digitization eliminating the need to own or store a physical item
- cataloging down to individual words or glyphs
- browsing based on hyperlinks, keyword, or any defined measure of relatedness; materials on the same subject do not need to be near one another in any physical sense
- Broadcast technology; users need not visit a digital library except electronically; for them the library exists at any place they can access it, e.g., home, school, office, or in a car.

2.3. Requirement for digital libraries:

The Internet and World Wide Web provide the impetus and technological environment for the development and operation of a digital library. The Internet provides the TCP/IP and or its associated protocol for accessing the information and web provide tools and technique for publishing the information over Internet. In the digital environment it is reasonable to say that a central back up or archive should be created at the national level, which will store information output of the region as well as information from outside the country. Some of the requirements for digital libraries are:

- Audio visual: Color T.V., V.C.R., D.V.D., Sound box, Telephone etc.
- Computer: Server, P.C. with multimedia, U.P.S. Etc
- Network: LAN, MAN, WAN, Internet etc.
- Printer: Laser printer, Dot matrix, Barcode printer, Digital graphic printer etc
- Scanner: H.P. Scan jet, flatbed, Sheet feeder, Drum scanner, Slide scanner, Microfilming scanner, Digital camera, Barcode scanner etc

- Storage devices: Optical storage device, CD-ROM, Jukebox etc.
- Software: Any suitable software, which is interconnected and suitable for LAN and WAN connection.

2.4. Factors of change to digital libraries:

The limited buying power of libraries, complex nature of recent document, storage problem etc are some of the common factor which are influencing to change to digital mode, some other factors are,

- Information explosion
- Searching problem in traditional libraries
- Low cost of technology: When we consider the storage capacity of digital document and its maintained then it can be easily realize that the cost of technologies is much more less than that of traditional libraries.
- Environmental factor: the use of digital libraries is the cleanest technologies to fulfill the slogan “Burn a CD-ROM save a tree”
- New generation needs

3. Advantages of the Digital Library

A digital library is not confined to a particular location or so called building it is virtually distributed all over the world. The user can get his/ her information on his own computer screen by using the Internet. Actually it is a network of multimedia system, which provides fingertip access.

1. **No physical boundary:** The user of a digital library need not to go to the library physically, people from all over the world could gain access to the same information, as long as an Internet connection is available.
2. **Round the clock availability:** Digital libraries can be accessed at any time, 24 hours a day and 365 days of the year
3. **Multiple accesses:** The same resources can be used at the same time by a number of users.
4. **Structured approach:** Digital library provides access to much richer content in a more structured manner i.e. we can easily move from the catalog to the particular book then to a particular chapter and so on.
5. **Information retrieval:** The user is able to use any search term bellowing to the word or phrase of the entire collection. Digital library will provide very user friendly interfaces, giving click able access to its resources.
6. **Preservation and conservation:** An exact copy of the original can be made any number of times without any degradation in quality.
7. **Space:** Whereas traditional libraries are limited by storage space, digital libraries have the potential to store much more information, simply because digital information requires very little physical space to contain them. When the library had no space for extension digitization is the only solution.
8. **Networking:** A particular digital library can provide the link to any other resources of other digital library very easily thus a seamlessly integrated resource sharing can be achieved.
9. **Cost** - The cost of maintaining a digital library is much lower than that of a traditional library. A traditional library must spend large sums of money paying for staff, book maintains, rent, and additional books. Digital libraries do away with these fees.

Disadvantages of the Digital Library

The computer viruses, lack of standardization for digitized information, quick degrading properties of digitized material, different display standard of digital product and its associated problem, health hazard nature of the radiation from monitor etc. makes digital libraries at times handicap.

1. **Copyright:** Digitization violates the copy right law as the thought content of one author can be freely transfer by other without his acknowledgement. So One difficulty to overcome for digital libraries is the way to distribute information.
2. **Speed of access:** As more and more computer are connected to the Internet its speed of access reasonably decreasing. If new technology will not evolve to solve the problem then in near future Internet will be full of error messages.
3. **Initial cost is high:** The infrastructure cost of digital library i.e. the cost of hardware, software; leasing communication circuit is generally very high.
4. **Band width:** Digital library will need high band for transfer of multimedia resources but the band width is decreasing day by day due to its over utilization.
5. **Efficiency:** With the much larger volume of digital information, finding the right material for a specific task becomes increasingly difficult.
6. **Environment:** Digital libraries cannot reproduce the environment of a traditional library. Many people also find reading printed material to be easier than reading material on a computer screen.

4. Conclusion:

Digital libraries are not going to replace the physical existence of document completely but no doubt to meet the present demand, to satisfy the non local user digitization must be introduced so that at least libraries becomes of hybrid nature. The initial cost of digitization is high but experiment shows that once digitization is introduced then the cost to manage this collection will be cheaper than that of any traditional library. Day by day the cost of digitization is decreasing, the online publication is increasing, the needs of user are shifting towards a different environment so it's needless to say that after one or two years my library or your library will go to be digitized so it's the pick time to all informational and library professional that they geared themselves to take the challenge.

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Usage Of E-Library

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INTRODUCTION

Libraries of all sizes and types are embracing digital collections, although most libraries will continue to offer both print and digital for many years to come. The goal of this report to provide information that libraries can use to make important decisions about collections, services and product design.

Many researches have attempted to predict or measure that impact through surveys, transaction log analysis and other research techniques. Hundreds of recent publications focus on how users interact with or how they feel about electronic library resources.

OBJECTIVES

1. To analyse the dependency of teachers and research scholars on e-resources.
2. To observe the benefits of e-resources over conventional sources of information.
3. To study the purpose and frequency of using the electronic resources and services available in the library.
4. To determine the perceived impact of the resources on their academic efficiency.
5. To know the quality of information retrieved through electronic resources.

REVIEW OF LITERATURE

1. Eason, Richardson and L.Yu (2000) in his paper titled "Patterns of Use of Electronic Journals" evaluates the users and features to be compared particularly useful for testing library catalog and website design.
2. Elia, George, Joseph Woelfel and Eleanor Jo Rodger (2002) in his paper titled "The Impact of the Internet on Public Library Use: An Analysis of the Current Consumer Market for Library and Internet Services" evaluates the journal of the American society for Information science and Technology".
3. Kling, Rob and Ewa Callahan (2003) in his paper titled "Electronic Journals the Internet and Scholarly Communication" evaluates the Annual Review of Information Science and Technology".

E-LIBRARY

It is an electronic or online library where one can have access to books, journals, novels, articles or any other information over net. Just sitting anywhere or anytime a user can read the material online.

TIER 1 STUDIES

It has eight group of studies. They are

1. SUPER JOURNAL

The SuperJournal project is a group of studies of e-journal use that began in 1995 in the United Kingdom in response to the information explosion and limited budgets. Academic scientists and social scientists were studied, including both faculty and students in British universities. The researchers use a variety of research methods, including log file analysis, surveys, interviews, and focus groups, to study how academic users interact with e-journals and what features they value.

2. DIGITAL LIBRARY FEDERATION/COUNCIL ON LIBRARY AND INFORMATION RESOURCES/OUTSELL (DLF/CLIR/OUTSELL)

Outsell, Inc., conducted a survey of information use for the Digital Library Federation and Council on Library and Information Resources in the fall of 2001 and early winter of 2002. Some 3,234 faculty, graduate students, and undergraduate students across seven subject at private and public doctoral research universities were interviewed over the Telephone.

3..HIGH WIRE/E-JUST

The Stanford E-Journal Users Study (e-JUST), published by HighWire Press, used a variety of methods to gain insights into the use of electronic journals, including qualitative user surveys, transaction log analysis, and an ethnographic study of scholarly e-journal usage. The participants included graduate students, faculty members, and clinicians from universities, hospitals, and government and academic research institutes from 99 countries. The studies were conducted between November 2000 and August 2002.

4.PEW INTERNET AND AMERICAN LIFE (WITH COMPARISON TO OCLC/HARRIS AND URBAN LIBRARIES COUNCIL)

The Pew Internet and American Life Project conducted two studies about how students use the Internet. In the "Internet Goes to College," 2,054 college students at two- and four-year public and private colleges completed surveys. In the other Pew Internet and American Life Project, "The Digital Disconnect: The Widening Gap between Internet Savvy Students and their Schools," middle and high school students were studied between November 2001 and March 2002

5.OHIO LINK

The Ohio Library and Information Network is a consortium of Ohio's college and university libraries and the State Library of Ohio. The consortium serves in excess of 500,000 students, faculty, and staff at more than 80 institutions of higher learning. This program, begun in April 1998, is ongoing.

6.TENOPIR AND KING STUDIES

The Tenopir and King research studies are a series of surveys of more than 16,000 scientists, engineers, medical professionals, and social scientists in university and non-university research settings. The surveys measure reading and authorship patterns of these subject experts through critical incident, demographic, and usage questions. Information-seeking behaviors, amount of reading, purposes of reading, and source of readings are all measured.

7. LIBQUAL+™

LibQUAL+™, conducted by the Association of Research Libraries (ARL) in conjunction with Texas A & M University, surveyed students, faculty, and staff at various community colleges, four-year colleges, and health science schools in the United States. More than 70,000 faculty, staff, and students related how often they used the physical and electronic libraries.

8.JSTOR STUDIES

The JSTOR system provides electronic archives of back issues of scholarly journals. JSTOR uses log analysis of both viewed and printed articles to characterize use of its materials. In the fall of 2000, JSTOR surveyed more than 4,000 academic users of the collection in humanities, social sciences, and economics to discover usage patterns and preferences of university faculty.

Participants Studied in Tier 2 Studies

Percentage Analysis

<i>Participants in Tier 2 Studies</i>	<i>Respondents</i>	<i>Percentage</i>
1.Faculty	24	48
2.Graduate Students	9	18
3.Academic Users	6	12
4.Working Professionals	5	10
5.General Public	4	8
6.High School Students	2	4
Total	50	100

INTERPRETATION

The above table revealed that participants studied in Tier 2 studies are 48% of the respondents are Faculty, 18% of the respondents are Graduate Students, 12% of the respondents are Academic Users, 10% of the respondents are Working Professionals, 8% of the respondents are General Public and 4% of the respondents are High School Students.

Garrett Ranking Test

Distribution of Respondents by Streams

Streams	Respondents	Garrett Mean Score	Rank
1.Social Science	9	41.82	3
2.Natural Science	23	46.12	1
3.Information Technology	8	40.76	4
4.Health Science	10	44.27	2
Total	50		

INTERPRETATION

From the above table it is revealed that Social Science has a garrett mean score of 41.82, Natural Science has a mean score of 46.12, Information Technology has a mean score of 40.76 and Health Science has a mean score of 44.27.

CONCLUSION

Although there are some contradictions in the findings of the many recent research studies on user behavior with electronic library collections, some clear messages emerge. Use of electronic journals increases every year. Among Faculty members, Graduate Students and other Professionals higher use of electronic journals is accompanied by a decrease in visits to the library. Desktop access, Speed of access and the ability to download, print and send articles are top advantages of electronic journals.

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Usage Of E-Library

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INTRODUCTION :

Libraries over the past few decades have evolved in their quest to continue to play a vital role in ensuring quality education and research with the advent of information and communication technologies such as the internet and the web, electronic resources have been widely accepted.

OBJECTIVES:

1. Faculty's awareness of online databases.
2. Faculty's usage of electronic resources for their academic work.
3. The benefit faculty associate with electronic resources.
4. Challenges faculty encounter in assessing electronic resources.

METHODOLOGY :

The present study is an empirical research based on survey method primary data was collected through questionnaire, for the research purpose primary data was collected personally and individually from the respondents.

SECONDARY DATA :

Secondary data consists of data collected using internet, books journals and articles.

REVIEW OF LITERATURE :

SchafnerA (1994) in his article to study on "Information Technology and libraries". Journals play a vital role in scholarly community as it serves the over all purpose of building a collective knowledge base, communicating information, validating the quality of research, distributing rewards and building scientific communities.

Tebiour,C(2003) in his article to study on "An overview and analysis of Recent research Studies" revealed that 83% of students surveyed felt that using electronic resources and saved them time and found it relatively easy to use.

Egberongbe.SH(2011) in his article to study on "The use and Impact of Electronic resource at the University of Lagos" showed the 77% of licitures preferred to use electronic resources compared to print resources because they found it less time cousuming.

DadzieP.s(2005) in his article to study on "Electronic resources access and usage indicated that even though general computer usage for information access of the art it infrastructure, the usage of scholarly databases was quite low.

Ajuwon(2003) in his article to study on "Medical informatics and Decision making.: revealed that the use of database was poor. This was due to the lack of awareness, lack of access to computers, insufficient training and the high cost of internet provision.

**Demographic
Table1:**

DEPARTMENT	NUMBER OF RESPONDENTS
Faculty of law	30
Medical Sciences	15
Faculty of Education	19
Faculty of Social Science	16
School of physical Sciences	20
Total	100

Table1:

Purpose for using the Internet		
RESPONSE	FREQUENCY	PERCENTAGE
Academic	57	49.56
Personal	53	46.09
Offical Work	5	4.35
Total	115	100

FACULTY'S AWARENESS OF ONLINE DATABASE:

Table 2 showed that as high as 49.56% of the respondents used the internet for academic work while 4.35% used it for official or clerical work such e-mailing and visiting other social networking sites.

HYPOTHESIS

The significant relationship between opinion towards faculty and students and level of satisfaction chi-square test is attempted with the wall hypothesis.

Table1:

E-LIBRARY AND LEVEL OF SATISFACTION				
E-LIBRARY	SATISCATION			TOTAL
	Low	Medium	High	
Faculty	4	9	5	18
Student	2	4	6	12
Total	6	13	11	30

Calculated chi-square value = 0.738

Degree of freedom = 2

Table value (5%) of significant = 5.991

Since the calculated value (0.738) is less than table value (5.991) so the null hypothesis is accepted.

GARRETT RANKING TECHNIQUE

REASONS	MEAN SCORE	RANK
Fast and Better Service	50.8	VI
Hitech Service	43.8	IV
Convenient timing	39.9	VI
Library image	66.5	I
Faculty usage of E-Library	40.3	V
Usage of E-Library students	53.6	II

Thus the Garrett score point were recorded Library image Garrett meanscore 66.5 is the first rank. In second place is usage of E-Library by students Garrett mean score is 53.6. In the third place fast and Better service Garrett mean score is 50.8. In the fourth place is Hitech service Garrett mean score is 43.8. In the fifth place the Faculty usage of E-library the Garrett score is 40.3.

CONCLUSION :

The real purpose of any academic library is to provide its users with relevant upto date information in order to fulfill its core function of facilitating teaching, learning and research. In today's contemporary world where the internet has become crucial to the survival of any establishment. It is incumbent on academic libraries too provide its user with access to online electronic resources not only for the purpose of research but also too support their teaching. However despite this overwhelming revelation it was realized that the patronage of the library's online academic database.

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Use Of Multimedia And Animation In Teaching

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Introduction :

The keystone in the educational edifice is doubtless the teacher. On him depends much more than any other, the progress and prosperity of children. Nobody can effectively talk his place or influence children in the manner and to the degree it is possible, for him alone to do. The Secondary Education Commission (1953) says 'we are however, convinced that most important factor in the contemplated education reconstruction in the teacher. His quality, his educational qualification, his professional training and the place he occupies in the school as well as in the community.

Aptitude as defined in Warren's Dictionary "is a condition or set of characteristics regarded as symptomatic of an individuals ability to acquire with training some knowledge or skill or set of response, such as the ability to speak a language, to produce music etc." Aptitude is a present pattern of traits is in born or acquired. It is certainly a product of inborn potentialities and acquired whether aptitude is inborn or acquired.

Objectives :

To identify the factors that influences the use of multimedia and animation in teaching.

To anlyse the attitude of multimedia.

To find out the problem of use multimedia and animation in teaching.

To study on teaching aptitude.

Review of literature :

Sajan (2010)¹ in his paper titled " Use of Multimedia and Animation in Teaching " examined the academic achievement at Graduate level over the Teacher Education Institute of Malabar area of Kerala to measure the teaching aptitude of student teachers in general and with respect of five different dimensions. The finding of study concluded that teaching aptitude reveals that the highest scoring dimension in the professional information and the least scoring one is the professional interest.

Dolmans S Vleuten (2002)² in his article titled "Use of Multimedia and Animation in Teaching " points out the am of the study was to develop and validate a framework of teaching competencies in students centered higher education. The finding study concluded that the integration of personal characteristics, knowledge, skills and attitudes was problematic.

Sharma R C (2011)³ in his paper titled "Use of Multimedia and Animation in Teaching " comments intellectual level and morality of prospective teacher have a positive relation.

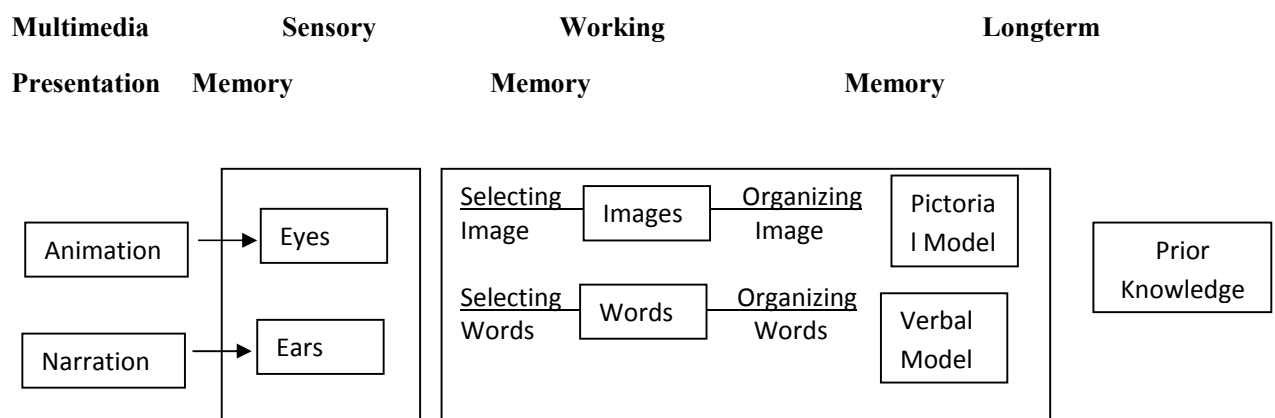
Bandhopadhy J (2012)⁴ in his work titled "Use of Multimedia and Animation in Teaching " examined the environmental influences. Academic achievement a scientific aptitude as determinants of adolescents for the PhD in education.

Saxena JS (2012)⁵ in his paper titled "Use of Multimedia and Animation in Teaching " examined the effectiveness in relation to adjustment, job of satisfaction and aptitude towards teaching and success in teaching.

Information delivery theory of multimedia learning:

A straight forward theory is that learning involves adding information to one's memory (SCC on Mayer, 1996, in press). According to this theory, The computer is a system for delivering information to learners. The instructional designer's role is to present information (e.g. as words or pictures , or both) and the learners role is to receive the information. For example, when an explanation is presented in words (such as narration) the learner can store the information in memory. Adding pictures contain the same information as the words, Thus, according to this strict version of the information delivery theory, multimedia presentations should not result in better learning than single medium presentations. However if some learners prefer dia presentation would be effective in delivery, information effectively to both kinds of learners. In this wary, learners could select the delivery route they prefer. Thus, according to lenient version of the information delivery theory, multimedia presentations should result in better learning the single medium presentations.

How should Animation be used within multimedia presentation :



Multimedia Classroom :

The time it takes to earn the degree in education today is based on an increasingly outdated model. So many hours in a classroom entitle a student to a receipt on the form of a grade, and so many receipts can be redeemed for a credential in the form a degree education today is just beginning to think of shifting in basis of certification from time served to skills and knowledge obtained.

The Computer Internet :

Computer technology has given us internet, which has various uses. Dealing with education, internet presents the students a wide range of collection of English language texts in many discipline departments. Before the general use of computers in colleges and universities to teach writing, students met in traditional classroom and were taught to write standard essay. Instruction was personified commonly by the teachers standing behind a lactern or by the teacher making errors on student texts (Blair, 1997). With the rapid proliferation of the personal computer, many institution of higher education created "Computerized writing courses" emphasizing word processing skills and collaborative critiquing believing that using the technology, "Democratizes the classroom discussion, allowing students to transcend the limits of the traditional computer technology has given us internet, which is an electronic medium in which both print and visual resources are invariably bound.

Multimedia Principle :

The first principle is that students learn more deeply from animation and narration than from narration alone. The theoretical rationale for this principle is that students are better able to build mental connections between corresponding words and pictures when both are presented (i.e animation and narration) than when only one is presented (i.e. narration) and the learner must

mentally create the other. In each of four experiments, adding pictorial explanation (i.e. animation) to a verberal one (i.e. narration) resulted in a substantial improvement in learners problem solving transfer performance. The median effect size was 1.74, indicating a strong and consistent effect. In these studies, animation enhanced student understanding of scientific explanations of how pumps work, how brakes work, or how to add and subtract signed numbers. In short, we have consistent evidence for the multimedia principle that work and pictures are better for promoting learner understanding than are words alone. Not all animations are equally effective in promoting understanding in learners, so each of the next six principles focuses on the difference between effective and ineffective uses of animation.

Table 1

Gender wise-Classification

SI.No	Particulars	No. of Respondents	Percentage
1.	Male	26	52
2.	Female	24	48
Total		80	100

Source : Primary data

Inference :

The above table shown that out of 50 respondents, 52% (26) of respondent are male, 48% (24) of respondents are female.

Table 2

Problem of multimedia and animation

SI.No	Problem	Garrett Mean	Rank
1.	Teaching	53.54	II
2.	Lack of time to take rest	52.2	III
3.	Dependent decision	43.78	V
4.	Lack on adopting innovation	54.14	I
5.	Lack of teaching skill	49.3	IV

Source : Primary data

Inference :

The above table revealed that, lack of adapting innovation ranked first the garrett mean score of 54.14. Next teaching second ranked the garrett mean score of 53.54, Next lack of time to take rest ranked the garrett mean score of 52.2, next lack of technical skill fourth the garrett mean score of 49.3, next dependent decision fifth the garrett mean score of 43.78.

Table 3

Age and Level of satisfaction

SI.No	Age	Highly agree	Agree	Neutral	Disagree	Highly disagree	Total
1.	Male	9	6	5	3	2	25
2.	Female	3	6	7	5	4	5
	Total	12	12	12	8	6	30

$$\begin{aligned}
 & (R-1) (C-1) \\
 & = (2-1) (5-1) \\
 & = 1 \times 4 \\
 & = 4
 \end{aligned}$$

Calculated of Chi-Square value = 7.35

Degree of freedom = 4

Table value (5%) of significant = 5.32

Since the calculated value (7.35) is greater than table value (5.32), so the null hypothesis is rejected.

It is concluded that there is relationship difference between the Gender and satisfaction level of respondents.

Conclusion :-

Through the interaction with multimedia, the students become increasingly familiar with academic vocabulary and language structure. Connecting with the internet will make the benefit of increased student motivation. Students are eager to begin class often arrive early at the computer lab, logging on the internet beginning research on their own. They also often stay after class to continue working on the internet. Overall students develop greater confidence in their ability to use English because they need to interact with the internet through reading and writing. Using multimedia provides the students to gather information through media that encourages their imagination, interests. Also using this technology combined with the sense of teaching will create a successful teaching method.

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E-Learning Development and Experience

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Introduction:

E-Learning comes at a time of great transformation in how individuals and organizations learn and learning performance in the classroom and online remains as important as ever. E-learning is much more than e-learning. The term e-learning simply occurs at the computer, which generally means over the internet, with the information delivered via a browser like the internet. Thus it is a result of a computer oriented analysis and design of such a system. The traditional environment of education system begins to transform by the use of technology for the purpose of an Interactive communication. The popular concept in education system nowadays throughout the world, although most recognize that e-learning has the potential to enhance greatly learning and the learning experience at all levels, many feel that its drawbacks are currently still too great to commit so heavily to it.

Objectives of the study:

- i. To know the meaning of E-learning
- ii. To study the satisfaction level of e-learning.
- iii. To study the development of e-learning
- iv. To analyze the performance of e-learning.
- v. To improve access of education and training.
- vi. To improve the quality through e-learning.

Methodology of the Study:

Primary Data

The present study is an empirical research based on survey method. Primary data was collected through questionnaire for the research purpose primary data was collected personally and individually from the respondents.

Secondary Data:

Secondary data consists of data collected using internet, books, journals and articles.

Sampling Design:

For the present study convenience sampling technique was used 50 respondents were selected from different groups to make the sampling a representative one.

Review of Literature:

Mason (2001)¹ in his book entitled “Time is the New Distance”, explained that lack of time rather than long distance has become one of the primary reasons that students withdraw from courses the student experience of the technology.

Blass and Davis (2003)² in their Journal entitled “Journal of further and Higher education”, explained that pursuit of evaluation criteria for e-learning propose a framework with four ‘higher order criteria’, viz, appropriateness, design, interaction and evaluation within these guiding principle the framework.

Imel (2002)³ in his article entitled, “E-learning trends and issues alert”, reports that much e-learning fails to live up to learner expectation. It would therefore seem appropriate to focus attention

on the student experience of e-learning and to listen to student's voices in seeking to extend our knowledge of e-learning.

Pange and Hung (2003)⁴ in their book entitled "Education Technology" explained that use concepts such as cybernetics or activity theory as the basis for the analysis and evaluation of e-learning environments.

Whittermore and Knafl (2005)⁵ in their Journal entitled "The integrative review; updated methodology" explained that the analysis based on the concept of theoretical saturation in this integrative review data analysis data reduction and data display are equally important the authors conducted conventional subject searches in 30 academics database.

E-Learning:

E-learning is the employment of technology to aid and enhance learning. It can be as simple as high school students watching a video documentary in class or as complex as an entire university course provided online. E-learning began decades ago with the introduction of televisions and overhead projectors in classrooms and has advanced to include interactive computer programmes 3D simulation, video and telephone conferencing and real-time online discussion group comprised of students from all over the world. As technology advances so does e-learning making possibilities endless.

The student experience of e-learning

The literature on e-learning is merely a description what the teacher could do or has done online, while the student experience of those activities goes largely undocumented. If the view of e-learning as a system is accepted, then there is no single 'experience'. Rather, the experience of a particular student or group of student is a direct result of the particular combination of factors which make up the e-learning system described in this paper.

Within the diversity of student experience however, there are some common factors which have been reported in the literature as significant determinants of student satisfaction with the online aspect of e-learning.

Measure Development

In developing the measure, we followed the steps advocated in psychometric literature.

- i) Spanned the full domain of our definition.
- ii) Items that was understandable to work adults.
- iii) It was concise enough to use in a variety of research settings, without taxing the energy of respondent.

We developed an initial pool of 48 items based on the constitutive definition presented above and based upon previous theorizing and research.

To check the adequacy of this deductive approach to item generation, we also followed an inductive approach by conducting 20 in-depth interviews with MBA students at two large state universities.

The survey items were designed to tap the full domain of ethical leadership that could apply to both formal and informal leaders.

This culling process result in a set of ten items for the proposed Ethical leadership scale (ELS).

Now the researcher analyzed the socio-economic profile of the respondents of this study.

Table -1
Genderwise Classification of the Respondent.

Sl. No.	Gender	No. of respondent	Percentage
1	Male	18	36
2	Female	32	64
	Total	50	100

Source: Primary Data

The above table shows that out of 50 respondents, 32 of the respondent are female and the remaining 18 of the respondents are male.

Table -2
Marital status of the respondents

Sl. No.	Marital Status	No. of respondent	Percentage
1	Married	35	70
2	Unmarried	15	30
	Total	50	100

The above table shows that out of 50 respondents, 70% of the respondents are married and remaining 30% of the respondent are unmarried.

Hypothesis

The following null hypothecation has been formulated. To analyze the relationship between opinion of respondent towards marital status and their level of satisfaction of e-learning chi-square test is applied.

There is significant relationship between opinion of respondents towards Marital status and level of satisfaction of e-learning chi-square test is attempted with the null hypothesis.

Marital Status	Satisfaction level			Total
	Low	Medium	High	
Married	7	20	8	35
Unmarried	3	8	4	15
	Total	10	28	50

Source: Computed Data

Calculated chi-square value = 0.738

Degree of freedom = 2

Total value (5%) of significant = 5.991

Since the calculate value (0.738) is less than table value (5.991), so the null hypothesis is accepted.

It is concluded that, there is no relationship difference between the Marital Status and satisfaction level of e-learning.

An attempt has been made to rank the project outcomes of the students likert 5 point scale is used.

Table -3**Actual Outcomes of Project for Students**

S.No.	Project outcomes of student	SA	Agree	No	DA	SDA	Total respondent
1	Improved quality of learning outcomes	15	13	4	6	12	50
2	Improved attitudes to learning	14	17	6	10	3	50
3	Improved learning productivity	18	12	3	9	8	50
4	Improved learning experience	21	13	7	4	5	50
5	Development of learning	24	15	2	6	3	50

Actual Outcomes of Project of Students

S.No.	Statement	SA	Agree	No	DA	SDA	Total respondent
1	Improved quality of learning outcomes	45	52	12	12	12	133
2	Improved attitudes to learning	70	68	18	20	3	179
3	Improved learning productivity	90	48	9	18	8	173
4	Improved learning experience	105	52	21	8	5	191
5	Development of learning	120	60	6	12	3	177

S.No.	Statement	Total	Rank
1	Improved quality of learning outcomes	133	V
2	Improved attitudes to learning	179	II
3	Improved learning productivity	173	IV
4	Improved learning experience	191	I
5	Development of learning	177	III

Source: Computed Data

The above table revealed that improving learning experience in the first rank. The improved attitude to learning is the second rank. The Development of learning arrived Third rank. The improved learning productivity has fallen fourth rank. The final rank is the improved quality of learning outcomes of the outcomes project for students.

Conclusions:

Government and donors in developing countries realize the critical importance of education. The investment is leading to significant progress in increasing the quality of school and student and the next challenge is to update the curriculum and improve the quality of education. This report has attempted to provide a compilation of research on e-learning impacts and to discuss promising practices to inform new and on-going e-learning programs. The challenges and that provide a platform for e-learning transformative effects.

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Adventure Of Modern Teaching Strategies

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Introduction:

Undoubtedly, the teacher plays a fundamental and central role in the life of the child and in the future of the ummah in general. He provides him with science, knowledge, morals, behavior, belief and ambition as they spend together almost eight hours a day full of activity, vitality and vigour. These hours are longer than those the child spends with his parents and relatives. Accordingly, the teacher holds the position of the fundamental educator, the first teacher and the central actor in the life and upbringing of the child. If the teacher is good, the child and the society will be definitely good, because the "Industry" of the educated, responsible and believing person is the cornerstone of the edification of society, civilization, culture and the future.

Objectives:

1. To read and study the odyssey.
2. To focus on the themes of maturation and identity in the odyssey.
3. To study the concepts of initiation and the passage from youth to adulthood.
4. To study the characters of Odysseus and Penelope as examples of adult people who are mature, although in some ways they are still growing.
5. To study the characters of Telemachus and Nausicaa as young people who are just embarking on the road to maturity.

Review of Literature:

Meyers and Jones (1993) in their entitled, Active learning as learning environments explained that as learning environments "explained that allow students to talk and listen, read, write and reflect as they approach course content through problem solving exercises, informal small groups, simulations case studies role playing and other activities all of which require students to apply they are learning.

Bruffee (1993)² in their paper entitled, "Collaborative learning. Is often used as a synonym for cooperative learning" explained that when in fact it is a separate strategy that encompasses a broader range of group interactions such as developing learning communities stimulating student faculty discussions, and encouraging electronic exchanges.

Gilbert (1995)³ in their journal entitled "Distance learning : Distance learning or distance education as a teaching pedagogy" explained that however is an important topic of discussion on college campuses today. Any form of teaching and learning in which the teacher and learner are not in the same place at the same time.

The educational process is an interactive process:

The Arab Islamic educational system was characterized in the previous ages by the provision of knowledge to students without any interaction, which made the educational process mono-oriented or basically non-interactive and not based at all on the feedback technique to redress or correct any flaw that can tarnish it. It is the period of the transmission of knowledge either at the level of full comprehension or that of assimilation for good usage and better exploitation and from, does not enable the learner to use his critical thinking in the discussion of knowledge transmitted to him to better understand and use it. Therefore, the knowledge received through the educational process remains a passive knowledge instead of being an active knowledge which leads in the long term to disorders and failures in the entire educational system either at the level of school failure or that of juvenile delinquency.

This non-interactive educational system led to "the pedagogy of preaching" that produced generations of preaching teachers who mastered the cramming of learners' heads with a "knowledge

merchandise through memorization and recitation provided that it is returned to its owners as it is in the exam at the end of the academic year.

The preaching teacher has reduced the educational process to the following steps characterized by the predominance of quantity over the method understanding hence quality.

Listening:

Learning not interrupting or trying to discuss the method of instruction or the content, and any attempt in this regard is considered disobedience of the teacher and is severely punished.

Memorization and storing:

Storing knowledge faithfully and giving it back complete upon request without adding any personal touches thereto production.

Submission:

Submission not arguing the teachers educational choices and method of performance even if the purpose is to better assimilate the subject taught.

Parroting:

Teaching using the method of repetition and imitation without encouraging the personal initiative of the learner so as to give him an outlet for his creative and knowledge energies and prompt him to rely on critical thinking.

Guidance:

Relying on the method of preaching and guidance in the transmission of knowledge while disregarding the psychological aspects of the teaching learning process.

Duties and Responsibilities:

The duties and responsibilities of the new teacher can be classified as follows:

- ❖ Making lifelong education lovable
- ❖ Encouraging learning not based on the teacher.
- ❖ Teacher right thinking;
- ❖ Defining the pitfalls and flaws of thinking to be avoided;
- ❖ Developing the learners self-confidence;
- ❖ Teaching the learner the love of life, investment of his energies.

Woman researcher Baron could distinctive a set of two categories of distinctive features required in the effective and successful teacher.

1. The Internal Characteristics:

Which are as follows:

- 1) Scientific Competence
- 2) Good planning for teaching.
- 3) Using diverse teaching methods.
- 4) Efficient teaching inside the class.
- 5) Class positive control during teaching.

The possibility to practice what students learn outside the school.

2. The External Characteristics:

Working to obtain the support of the family and all the categories of the local community for the educational process:

Close understanding of the learner's environment: family society beliefs, traditions, Social status etc.

In a survey made by "Gerard Vicente" on upper secondary education students, he formed the following conceptions of the good and efficient teacher according to the students estimate, and they may be taken as referring to the required qualities in the exemplary teacher.

1. Understanding:

Meeting the learners need and showing understanding of his conditions 18%

2. The Educational Qualities:

Qualities relating to positive interaction in addition to knowledge and experience 16%.

3. Winning students sympathy 12%
4. Supremacy and high scientific level 10%
5. High scientific level 10%
6. Signs of students attention 8%.
7. Equity 5%.
8. Prompting students to express themselves 2%.

The researcher noted that students do not definitely question the teacher's authority since it is ethically based on the educational virtues scientific qualifications and practical experience of the teacher.

The Interactive Teacher:

- ❖ Open – mindedness
- ❖ Dialogue
- ❖ Continuous communications
- ❖ Cognizance of the leaders psychological factors;
- ❖ Adopting feedback;
- ❖ Adopting continuous assessment;
- ❖ stimulating the learner;
- ❖ Creating an educational environment consistent with the learners perceptions.

The efficient teacher:

Professional qualification and academic competence.

1. Good management of the class
2. Good planning of the educational process;
3. cognizance of the learners environment.

The ability to take the appropriate educational decision in the right time.

Drawing on in – service training to enrich the educational process:

Adopting different teaching methods and means;

facilitating the transmission of knowledge;

In this table showing the interactive process:

S.No	Statement	S.A	A	No opinion	Disagree	Strongly	Total
1	Listening	20	9	4	8	19	60
2	Memorization	12	15	2	17	14	60
3	Storing	7	18	3	19	13	60
4	Submission	12	6	2	18	22	60
5	Parroting	17	12	5	17	9	60

Table: 2

S.No	Statement	S.A	A	No opinion	Disagree	Strongly Disagree	Total
1	Listening	100	36	12	16	19	183
2	Memorization	60	60	6	34	14	174
3	Storing	35	72	9	38	13	167
4	Submission	60	24	6	36	22	148
5	Parroting	85	48	15	34	9	191

Table: 3

S.No	Statement	Total	Rank
1	Listening	183	II
2	Memorization	174	III
3	Storing	167	IV
4	Submission	148	V
5	Parroting	191	I

Inferences:

This table shows that the parroting ranked first with Garrett means score of 191. Next the table shows that the listening second ranked with Garrett means score of 183. Then the table shows that the memorization ranked third with Garratt mean score of 174. And the table shows that the storing ranked fourth with Garrett Means score of 167. And atleast the submission ranked fifth with garratt means score of 148.

Table: 1

S.No	Qualification	Respondent	Percentage
1	Illiterate	5	8.33%
2	12 th	2	3.33%
3	UG	6	10%
4	PG	4	6.6%
5	M.Phil	12	20%
6	Professional	15	25%
7	P.hd	16	26.6%=100

Source: Primary Data:

This above table out of to respondent 26.67 percent of the respondents are phd following that 20 percent of the respondents are phd following that 25 percent of the respondents professional that 20 percent of the respondents are M.Phil students and 1 percent of the respondents are UG students and 8.33 percent of the respondents are Illiterates, and 6.6 percent of the respondents are PG students and then last 3.33 percent of the respondent are 12th students group.

Table: 2

Age of the Respondents

Age	No of Respondent	Percent
20-30	24	40
30-40	12	20
40-50	9	15
Above 50	15	25
Total	60	100

Source: Primary Data:

The above table out of 60 respondents 40 percent of the respondents are between the age group of 20-30 following that 25 percent of the respondents are Above 50 age group that 20 percent of the respondents are between the age group of 30-40 and 15 percent of the respondents are between 40-50 age group.

Conclusion:

Research suggests that constructivist teaching is an effective way to teach. It encourages active and meaningful learning and promotes responsibility and autonomy. Because constructivist teaching beneficial in achieving desirable education goals for students, it is important for teachers to grow professionally towards a constructivist practice.

These findings have implications for the way constructivist and transactional curricula are implemented. They confirm that the responsibility for the professional development of teachers falls largely on the teacher themselves. This concept is generally recognized by teacher however the incentive to pursue personal professional development over the course of one's career is frequently lacking in teachers. For example, the importance of collegial sharing and support is widely accepted yet infrequently practiced except informally similarly, teachers who are familiar with reflective its importance in encouraging an awareness of how our students learn and, therefore in how we need to teach. To encourage incentive, this research suggests that teachers need to be provided with opportunities, resources, support encouragement and recognition in their professional development per suits. They need to know that their efforts are being supported by their colleagues, administrators and school boards.

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E-Learning And Hybrid Teaching

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Introduction

This research was inspired by recently developed hybrid e-learning practices and the latest theories about enhancing the effectiveness of the teaching, learning process. In the setting of a knowledge based economy and organizational learning. Learning theories such as learning in a community adaptive, scenario, collaborative and scaffolding learning can be integrated into many hybrid e-learning practices such as online digital content, multimedia training compact disks supplemental learning content online discussion and live broadcasting to improve the teaching and learning process. Theoretically the hybrid e-learning platform could incorporate the most up to date IT platforms in delivering applications such as those listed here much research on hybrid e-learning has focused on use of media technology.

In this paper the aim was to improve training effectiveness. By using a practical hybrid e-learning model that incorporated the principles of the abovementioned theories. The relevant information technologies with respect to the application of hybrid e-learning content were employed to build up the system platform.

Objectives of the study

The objectives were followed

1. To establish expectation for the student.
2. To study the learning prerequisites.
3. To examine the rules of learning specify measurable, timed, short observable.
4. To study the course development and teaching activities on relevant information and skills.
5. To indicate how success can be measured ; provide criteria for student assessment.

Review of literature

1. Kolb (1984) In his titled "E learning of hybrid teaching" examined that identified four learning style, namely diverger, assimilator, converger and accommodator described how these learning styles could result in personalized learning profiles because of different learning preference.
2. Sonjoy and Griffiths (2007) In his titled "E-learning resources" examined that the key issues presented a new approach to the incorporation of learning style theory in developing an adaptive e-learning system in which the adoption into education systems was improved.
3. Khan & Akhtar, (2008) In his titled "Excellence in teaching and learning through quality awareness" assumed that the scenario based learning method can be applied to Network teaching and Network learning to usefully record the enhancing student learning. Therefore we used only a few basic scenario based in the hybrid learning model.
4. Subbramani and Aldrich (2009) In his titled "E-learning and e-teaching" examined that suggested the scenario learning was not easily applied to the digitalised transfer of knowledge. Therefore we used only a few basic scenario based lessons in our hybrid e-learning model to reduce the cost and time involved in the production process.
5. Arnold and Smith (2010) In his titled "Usage of e-library" examined that worked with a practice oriented community to connect members together to share resources and complete the learning task effectively.
6. Bradbury (2011) In his titled "E-learning resources in India" Assumed that for the hybrid e-learning model used in this study the newsgroup learning environment on the Internet was used to promote learning as a group.

Conceptual structure

The conceptual structure of the hybrid e-learning model used in this study is set out along with the hybrid e-learning system based on the literature review and previously tested models used in industrial settings. Learning in a community and collaborative learning theory are applied in the e-learning group and e-workshop. While e-illustration and e-workshop are based on the concept of scenario learning.

1. E –learning map
2. E - illustration
3. E-learning group
4. E – compensation
5. E- workshop

E – learning map

A learning style inventory test was first provided in order to identify each student's learning reference the trainer. Then defined the specific learning map for each group of individual's with the same learning style each learning map had a different or e – comprehensive to make he learning preferences.

E – learning group

The resources in the learning community were shared through the newsgroup server. The communication between the trainers and the learners as well as the intractions among the leaner were carried out via publication and discussion on the internet. An audiovisual platform was provided for publishing ,learning “News” either by speaker phone or by cum viewing.

E – comprehensive

I n the scenario based learning process. Examples of vocational practices were provided through the server. The server actually had many inter facts for trainers to link to various case studies in the forms of hyper texes, websites.

E - illustration

The learners were inspired by browsing a full illustration of the field applications. A flowchart of the process of the practical application was provided in which each step was set out work with instructions, standard procedure and illustrate work sheets in multimedia format.

E – workshop

The students were analysis divided into different groups within group and between group workshop were provided. A specific procedure for online discussion and presentation must be followed and the trainer could guide each workshop to identify and illustrate useful knowledge resulting from the online collaborative learning.

Methodology

The primary data have been collected directly from the e- learning and hybrid teaching through on questionnaire. Secondary data have been collected from standared books, articles, magazines, encyclopedia and internet.

Primary data

The study mainly based upon the primary data. Interview schedule method is used to collect the data from the respondents sample size 50 percent have been appended in the e-learning.

Secondary data

The data required have been gathered by referring the reputed journals, magazines, standard news paper and book.

Table-1

Rank analysis

Table shows on e – learning and hybrid teaching

S.no	Hybrid teaching	Total	Rank
1	Micro learning	164	V
2	Personal learning	192	III
3	Distant learning	218	I
4	Learning ability	212	II
5	New technology	189	

Source: computed data

The above table review that distant learning ranked first with the garret mean score of 218, learning ability ranked second with the garret mean score 212, personal learning third with the garret mean score 192, new technology 189 garret mean score ranked with fourth and at last micro learning ranked with the garret mean score 164.

Table – 2

Percentage analysis

Analysis on qualification of the respondents

S.NO	Qualification	No . of respondent	percentage
1	Illiterate	12	24
2	Plus two	8	16
3	UG	9	18
4	PG	21	42
Total		50	100

Source : primary data

The above table shows that out of 50 respondents , 42 percent of the respondents are completed PG ,24 percent of the respondents are illiterate people. 16 and 18 percent of the respondents are completed plus two and UG degree respectively.

Table – 3

Gender of the respondents

Gender	No. of respondent	Percentage
Female	22	40
Male	28	60
Total	50	100

Sources :primary data

The above table out of 50 respondents, 40 percent of the respondents are between the female candidates. Following that 60 percent of the respondents are male candidates.

Conclusion

The proposed hybrid e-learning model integrates teaching and learning method that have been found to be effective in the part in order to remove the limitation on time, location and tutor's availability. That are imposed by a physical classroom. As all e-learning materials streaming on the platform were recorded and then reproduced digitally a resources pool of e learning content was produced that has been found to be an important knowledge asset through many pilot training courses held in Taiwan.

After applying various learning theories in order to improve the teaching and learning process. It was found that there are a great opportunity to incorporate many of these learning theories into integrated applications.

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E-LEARNING RESOURCE

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Introduction:

In comparison with the long history of Distance Education, e-learning is a relatively new phenomenon though etymologically e-learning covers any electronic mediated learning. It really caught the imagination of the educators with the emergence of the world wide web in 1991. For his study e-learning is defined as an internet or intranet-based and web-delivered teaching-learning system. There many benefit of e-learning ,but also resistance to it ,primarily because of technophobia and a lack of e-learning technology.

Objectives of the study:

- vii. To study the development of e-learning
- viii. To analyze the performance of e-learning.
- ix. To improve access of education and training.
- x. To improve the quality through e-learning.

Review of literature:

Homberg 1989⁽¹⁾ in his articles titled "e-learning" examined address popular misconception by emphasising that OL is not synonymous with DE any education institution earn after OL, "as long as they take measures to make their educational programmes more open and flexible as regards time,place course method ideas and people.

weller jm 2000⁽²⁾ in his book titled "e-learning resouces" analysed at the heart of open learning is learner choice putting decision about learnig into the hands of clearning into the hands of learning is learnings themselves.

unisa 2008⁽³⁾ in his journal titled "e-learning resources" evaluated a multi-dimentional concept aimed at bridging te time geographical economic social education and communication distance student and institution student and academics .student and coursewar an student peers.the flexibility of learning provision student -contredness supporting student and constructiong learning programmes with expectation that students an succeed.

wei 2010⁽⁴⁾ in his articles title "e-learning resource" examined one term ODL institution apperes to be highly problematic this description suggesstian institution that optimally accommodates deitance students choice in student learning matters ODL which is in effect a distance learning offering as is evident from process of formal procedure system.

Process of e-learning :

Analysis :

During analysis the designer identifies the learning problem goals and objectives the audience needs existing knowledge, and any other relevant characteritics, analysis also considers the e-learning environment any constraints, the delivery options and the timeline for the project.

Design:

A systematic process of specifying learning objectives, detailed story board s and prototypes are often made and the look and feel graphic design user interface and content is determined here.

Development:

The actual creation of the content and learning materials based on the design phase.

Implement:

During implementation the plan is put into action and a procedure for training the learner and teacher is developed materials are delivered or distributed to the student group after delivery the effectiveness of the training material is evaluated.

Evaluation:

This phase consist of formative and summative evaluation formative evaluation is present is each stage of the addle process summative evaluation consists of test designed for creteria related

referenced items and providing opportunities for feedback from the users revisions are made as necessary.

Types of e-learning:

There are basically two types of e-learning synchronous , asynchronous synchronous means "at the time" involves interaction of participants with an instructor via the web in real time .

Asynchronous which means "not at the same time" allows the participant to complete the web based training at his own pace without live interaction with the instructor.

A new form of learning is emerging blended learning combines e-learning tools with traditional classroom training to ensure maximum effectiveness. Student can prepare for consolidate and recall classroom experience online, while gaining the benefits to interaction with teachers and students via an actual or virtual classroom. students learning and retention rates improve without sacrificing the convenience cos-effectiveness and customization of self-paced web-paged coursework blended learning offers.

Social benefit from classroom training focusing on learning that gains the most from face-to-face interaction.

Individualization benefit of self-paced, online learning for content that requires minimum interaction.

cost saving through minimizing the time away from the job and travel, classroom ,instructor expenses.

Greater flexibility to meet the different learning styles and levels of the audience.

Future of e-learning :

E-learning is here to stay as computer ownership grows across the globe e-learning becomes increasingly viable and accessible. Internet connection speeds are increasing and with that opportunities for more multimedia training methods arise with the immense improvement of mobile networks in the past few years and the increase in tele communication taking all the awesome features of e-learning on the road is reality with smartphones and others portable learning device. Technologies such as social media are also transforming education constantly.

Generally speaking learning is expensive takes a long time and the result can vary e-learning has been trying for years now to complement the way we clesrn to make it more effective and measurable e-learning trends can gives us a clear view on now the future of e-learning will be shaped.

Micro-learning :

Focuss on the design of micro-learning activities through micro-steps in digital media environments. which already is a daily reality for todays knowledge workers. these activities can be incorporated into a learners daily routines anlike "traditional" e-learning often tends towards push technology through push media .which reduces the cognitive load on the learners.it is also perfectives suited for mobile devies where long courses can be overskill.

Gamification

the use of game thinking and game machanics in a non-game context to engage wseers and solve problems.

personolized learning

the tailoring of pedagogy, curriculam and learning. environment to meet the the needs and aspirations of individuals learners.it may provide learners the opportunities to learn in ways that suit their individual learning styles and multiple intelligences.

Now the researcher analyzed the socio-economic profile of the respondents of this study.

Table 1
Gender of the Respondents

Gender	No. of Respondents	Percent
Male	22	41
Female	32	59
Total	54	100

Source: Primary Data

From the above table it reveals that out of 54 respondents, 41% are male respondents and rests of them are female respondents.

Table 2
Age of Respondents

Age	No. of Respondents	Percentage
20-30	22	40
30-40	10	19
40-50	9	17
Above 50	13	24
Total	54	100

Source: Primary Data

The above table out of 54 respondents, 40% of the respondents are between the age group 30 to 40. Following that 24% of the respondents are above 50 age group, that 19% of the respondents are between the age group of 30 to 40 and 17% of the respondents are between 40-50 age group.

An attempt has been made to rank the project outcomes of the students likert 5 point scale is used.

Table -3
Garett Ranking

Learning Faced by Students

S.No.	Challenges	SA	Agree	No	DA	SDA	Total respondent
1	Audio Learning	10	14	8	12	10	54
2	PowerPoint Presentation	20	10	10	8	6	54
3	Video Learning	25	20	0	4	5	54
4	Material Learning	20	18	10	4	2	54
5	Technical Skill	22	13	0	10	9	54

S.No.	Challenges	SA	Agree	No	DA	SDA	Total respondent
1	Audio Learning	50	56	24	24	10	164
2	PowerPoint Presentation	100	40	30	16	6	192
3	Video Learning	125	80	0	8	5	218
4	Material Learning	100	72	30	8	2	212
5	Technical Skill	110	52	0	18	9	189

S.No.	Challenges	Total	Rank
1	Audio Learning	64	V
2	PowerPoint Presentation	192	III
3	Video Learning	218	I
4	Material Learning	212	II
5	Technical Skill	189	IV

conclusion:

In this century the usage of communication and information processing software production software are improved a lot.also next generation of those tools won t be basic software running on digital devices only in computers or computer enabled devices such as cell personal nusic player or notebooks usina needs to think carrefully before claiming that it is an ODL institution. it has to face the reality of its students need training on e-learning before the university can impose e-learning. the university can impose e-learning we have students in deep rural areas without electricity-not to mention a computer for at least the following few years. The university needs to make provision for all its students-even students without access to computers.

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Use Of Multimedia And Animation In Teaching

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Introduction:

Educational technology is a relatively new field which aims at solving problems of teaching and learning. Hardware and Software are two structural components of this technology and multimedia is an important aspect related to them. Education as a system has some objective planned for the process, for the realization of which a variety of strategies, techniques and aids have been designed and devised by educational technologists, Multimedia approach is one such innovation that is aimed at improving the teaching learning process.

Objectives:

- 1) To focus on multimedia approach, which can enhance the quality of teaching learning process.
- 2) To study role of teacher in multimedia approach.
- 3) To study educational implications of multimedia.

Review of literature:

Prakash (1981)¹ in his entitled to develop a multimedia instructional system for remedial measures for class VIII students, in fractional numbers. The multimedia instructional system contains charts, flash cards, film-strips, audio – cassettes, assignments, and a self learning programme.

Visali (1982)² in his titled analysed by the influence of multimedia on learning. There is a wide spread assumption that the addition of still images, animation and sound to text will enhance any information product.

Vijaya (1983)³ in his article can be used in a multimedia benefit weaker students, second year undergraduate students were taught either by conventional methods or by a multimedia package.

Nature of Multimedia Approach:

1. Multimedia approach uses a number of media, devices, techniques, in the teaching learning process.
2. Multimedia approach has come out of researches and experiments in educational technology that have been undertaken in order to improve the process of teaching learning.
3. Multimedia approach aims at providing meaningful learning experiences via a mix of media in order to achieve predetermined objectives.
4. The choice of the media has to be done carefully so that one does not hamper or reduce the effect of the other i.e. each media must complement the other.

Role of teacher in Multimedia approach:

The teacher has to make a lot of modifications and adjustment if he has to adopt multimedia approach. His role would have a different notation compared to the traditional role. He would have to make these changes.

- i) The teacher has to adopt a number of methods and techniques, he cannot be satisfied with the lecture or the chalk talk method.
- ii) The teacher has to be aware of the different available media and their availability the teacher should be physically competent to use and demonstrate the use of different media.
- iii) The teacher should be skillful enough to make a judicious choice of media and be competent enough to mix them sequentially and in an orderly manner.

Educational Implications of Multimedia:

1. Multimedia enables students to represent information using several different media. Hypermedia links allow students to organize information in meaningful ways.
2. Multimedia can take into account different learning styles. Some students learn by interpreting text, while others require more graphical or aural representations.
3. Multimedia allows for self-pacing and discovery, students can take the time they need and choose the path of learning making learning meaningful and pleasurable.

Table – 1
Demographic profile of the respondents

Gender	No of respondents	percent
Male	30	56
Female	20	44
Total	50	100

Source: Primary data

From the above table, it reveals that out of 50 respondents and least of them are female respondents.

Table – 2

Age	No of respondents	Percent
20-30	13	24
30-40	9	17
40-50	10	19
Above-50	22	40
Total	50	100

Source: Primary data

The above table out of 50 respondents, 40 percent of the respondents are between the age group of above – 50, following that 24 percent of the Respondents are 20-30 age group, that 19 percent of the respondents are between the age group of 40-50 and 17 percent of the respondents are between 30-40 age group.

Table -3

S.NO	Statement	SA	A	NO	DA	SDA	Total
1	Multimedia	17	13	3	7	10	50
2	Animation	5	10	10	5	20	50
3	Video's	7	3	18	12	10	50
4	Sound	10	12	10	8	10	50
5	Graphics	3	7	13	7	20	50

S.NO	Statement	SA	A	NO	DA	SDA	Total
1	Multimedia	85	52	9	14	10	170
2	Animation	25	40	30	10	20	125
3	Video's	35	12	54	24	10	135
4	Sound	50	48	30	16	10	154
5	Graphics	15	28	33	14	20	110

S.NO	Statement	Total	Rank
1	Multimedia	170	I
2	Animation	125	II
3	Video's	135	III
4	Sound	154	IV
5	Graphics	110	V

Inferences:

The above table revealed that use of Multimedia and animation in teaching ranked with the Garrett mean score of 170.next second with the Garrett mean score of 125. Next third with the Garrett mean score of 135.next fourth with the Garrett mean score of 154. Next fifth with the Garrett mean score of 110.

Conclusion:

Multimedia approach in schools/college is effective for students to learn both 'from' & 'with' it. The focus is now on media and technology because of their advantages in terms of repeatability, transportability and equity of access.Multimedia helps students to construct knowledge actively work in group and use multi-senses at a time. Multimedia is very effective and advanced approach in highereducation.

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Importance Of Online Test And Evaluation

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INTRODUCTION TO ONLINE EXAMINATION SYSTEM

Online Examination System forms the lifeline of the Educational Institutes to the functioning of the Examination. Online Examination System is very important for an Institute to handle the online examinations and their evaluate results. Online Examination System is very useful for any Institute to test their students continuously for their mutual development and know about their progress. Online examination system is helpful for conducting (MC) Multiple Choice and fill in the blanks examinations which can be conducted regularly. It can also be used for surprise tests as it can provide immediate results and save precious time of faculties to check student's copy and prepare mark sheets.

Objective

Online Examination is a web based project .It assesses students by taking online objective tests. These tests are customizable. Administrator can set time for examination. It will be useful to educational institutes for conducting test and get quick result by automated checking of answers based on the response given by the student.

Features Of Online examination

- Secure
- Easy to use
- Reliable and accurate
- No need of examiner

Oveview

The following stages will be there for taking Online test

- ❖ Login
- ❖ Test
- ❖ Result

Login:-

There is a quality login window because this is more secure than other login forms as in a normal login window there are multiple logins available so that more than one person can access to test with there individual login. But in this project there is only one login id i.e. administrator id and password by which a person enter the site. Hence it is more secure and reliable than previously used on-line test simulators.

Test:

Test page is the most creative and important page. It consists of many modules such as Subject selection, Utilities etc., There will be many choices in the subject selection. From the given choices the candidate can select his field (like C, C++ and JAVA etc) for writing the test. Utilities includes

- ❖ Skip and come back to the question afterwards if needed.
- ❖ Gives the list of attempted and unattempted questions and can go to any question directly and can either attempt or change the answer of the already attempted question.

Existing system

The whole process of assigning test and evaluating their scores after the test, was done manually till date. Processing the test paper i.e. checking and distributing respective scores used to take time when the software was not installed.

Disadvantages of current system

The current system is very time consuming. It is very difficult to analyze the exam manually. To take exam of more candidates more invigilators are required but no need of invigilator in case of on line exam. Results are not precise as calculation and evaluations are done manually. The chances of paper leakage are more in current system as compared to proposed system. Result processing takes more time as it is done manually.

Characteristic of the proposed system

The online test created for taking online test has following features

In comparison to the present system the proposed system will be less time consuming and is more efficient.

Analysis will be very easy in proposed system as it is automated.

Result will be very precise and accurate and will be declared in very short span of time because calculation and evaluations are done by the simulator itself.

The proposed system is very secure as no chances of leakage of question paper as it is dependent on the administrator only.

The logs of appeared candidates and their marks are stored and can be backup for future use.

Evaluating the MCQ-based online test

The main objectives of the evaluation are:

To identify students' perception of feedback provided by the online test, which is whether the various forms of feedback provided, enhance their learning.

To investigate the suitability and effectiveness of the online test .

To study the effects of usability issues of the online test.

To identify students' preparedness and the relationship with the marks they obtained.

The first and second objectives focus on the evaluation of the test's functionality, while the third objective focuses on the evaluation of its usability. The fourth objective is related to the analysis of the data obtained from the evaluation. The evaluation questionnaire is structured in such a way that both functionality and usability are evaluated based on a number of criteria. Effectiveness of the test for e-learning, delivery, assessment and feedback are the criteria used for evaluating the test's functionality. The criteria for usability include ease-of-use, navigability, availability and response time.

Quality is defined as the degree to which something is useful for its intended purpose. In testing and assessment practice, the variety of intended purposes is very large and, furthermore, the solutions chosen to reach those purposes are endless. And, when quality is defined as being dependent on the purpose of a test, it seems hard, or even impossible, to develop an evaluation system with fixed criteria that are suitable for all possible tests and assessments . Standards mention aspects of quality that you should comply with, in order to develop sound and reliable tests. Evaluation systems focus on evaluating a test, and decide what quality aspect must be met to ensure minimal quality.

Therefore, evaluation criteria that do lead to a result that states whether an exam question is good enough. These criteria are built into the system in such a way that, once the evaluation result is introduced an action of one of three actions is done. The exam administrator can delete, modify, and sustain questions.

Evaluation Criteria

The education scientists always introduce some guidelines to exams designers to be considered when developing good test questions such as:

The questions should be linked to the educational objectives to be achieved, which are represented in the learning outcomes.

The questions should be formulated as precisely and clearly to enable the student to understand it easily.

The number of questions should be suitable to the introduced exam time.

Questions should vary to include easy and medium difficulty, and other difficult questions to verify the ability to distinguish between students.

Beside those guidelines, the exam questions have to be evaluated after exam conduction in order to guarantee for a high percentage the quality of the exam. Here we implemented different equations that measure the difficulty, easiness, and excellence of exam questions. Here we explain how to determine the coefficients of ease, difficulty, and excellence of exam questions and particularly in multiple-choice online exams:

Difficulty coefficient

Difficulty Coefficient is defined as: the percentage of students who answered the question correctly. Difficulty coefficient is calculated as follows

$$Dq = T/N \quad (1)$$

where:

Dq: is the difficulty Coefficient.

T: Number of students who answered the question correctly.

N: The total number of students who answered the question.

For example; If we assume that (40) students from (100) answered the first question correctly, so the difficulty coefficient for this question is: $40/100 = 0.4$. Since the difficulty coefficient is a ratio, so its value is between zero and one, and when the coefficient of difficulty is zero or close to zero it is a sign that the question is very difficult, and if its value is 1 or close then that means that the question is very easy. This means that the difficulty factor inversely associated with easiness of question in the sense that the high difficulty coefficient value of a question is an indication of ease of the question. So, from the same equation, we can calculate the easiness coefficient of a question. It is recommended that the difficulty values are between 0.50- 0.75. The exam designers recommend putting some easy questions at the beginning of the exam to encourage students, but some hard questions that determine strong students are posted at the end of the exam.

Excellence coefficient

A good test distinguishes between students who know the material and those who do not, and more than that distinguishes between those who know the material and understand more and those who understand less. To calculate Excellence coefficient, we take the top 25% of students to represent the upper group, and the lowest 25% to represent the lower group, then, we calculate correct answers to a question in both groups and then we calculate the excellence coefficient as follows:

$$\text{Excellence coefficient} = (X - Y) / 0.25N \quad (2)$$

where:

X = Number of students who answered the question correctly from the upper class.

Y = number of students who answered the question correctly from the lower class.

N = sample size.

As a general rule, the question excellence coefficient of 0.2 or more is considered to be a good question

Usability evaluation

The evaluation starts with the usability questions. Keeping in mind that the students had gone through an extensive test consisting of 50 questions, it was very difficult to accommodate questions, covering all aspects of usability. The questions for usability are divided into three evaluation criteria, which are loading and response time, ease-of-use and whether the online test is informative.

Functionality evaluation

The evaluation criteria specified for the functionality evaluation are delivery, assessment and feedback.

Conclusion

We have come to the conclusion that online test is considerably superior to paper-and-pencil exams. Online exam system reduces the examination work. The evaluation also be done in a quick manner.

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E- Learning Resources And Its utility In Library

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1. Introduction

E-Learning as a strictly being accessible using technological tools that are web-based, web-distributed, or web-capable. The belief that e-Learning not only covers content and instructional methods delivered via CD-ROM, the Internet or an Intranet but also includes audio- and videotape. E-Learning is not only procedural but also shows some transformation of an individual's experience into the individual's knowledge through the knowledge construction process [1]. "**Electronic resource**" is defined as any work encoded and made available for access through the use of a computer. It includes data available by (1) remote access and (2) direct access (fixed media). In other words: Remote access (electronic resources) refers to the use of electronic resources via computer networks. Direct Access (electronic resources) refers to the use of electronic resources via physical carriers (e.g., discs/disks, cassettes, cartridges) designed to be inserted into a computerized device or its auxiliary equipment. E-resources represent an increasingly important component of the collection-building activities of libraries. When the Library collects both electronic and analog versions of a resource, both versions are retained as permanent holdings of the Library. For both direct and remote access resources, the Library will endeavor to archive these resources following standard practices, guidelines and legal requirements. For remote access resources, when permission to archive them is unattainable, the Library will only provide a link to those resources with current subscriptions or when the Library has purchased perpetual access to the resource.

2. E-learning components

E-learning approaches can combine different types of e-learning components, including: (a) e-learning content; (b) e-tutoring, e-coaching, e-mentoring; (c) Collaborative learning; and (d) Virtual classroom.

(a) E-learning content can include: (i) Simple learning resources; (ii) Interactive e-lessons.

(i) Simple learning resources are non-interactive resources such as documents, PowerPoint presentations, videos or audio files. These materials are non-interactive in the sense that learners can only read or watch content without performing any other action. These resources are designed in a structured way; they can be a valuable learning resource even though they don't provide any interactivity.

(ii) Interactive e-lessons: The most common approach for self-paced e-learning is Web-based training consisting of a set of interactive e-lessons. An e-lesson is a linear sequence of screens which can include text, graphics, animations, audio, video and interactivity in the form of questions and feedback. E-lessons can also include recommended reading and links to online resources, as well as additional information on specific topics.

(b) E-tutoring, e-coaching, e-mentoring:

Services which provide human and social dimensions can be offered to learners to support them through the learning experience and also provide individual support and feedback to learners through online tools and facilitation techniques.

(c) Collaborative learning:

Collaborative activities range from discussions and knowledge-sharing to working together on a common project. Social software, such as chats, discussion forums and blogs, are used for online collaboration among learners. Learners can comment and exchange ideas about course activities or contribute to group learning by sharing their knowledge. Collaborative project work implies collaboration among learners to perform a task. Collaborative activities can include project work and scenario-based assignments.

(d) Virtual classroom:

A virtual classroom is the instructional method most similar to traditional classroom training, as it is led completely by an instructor. A virtual classroom is an e-learning event where an instructor teaches remotely and in real time to a group of learners using a combination of materials (e.g. PowerPoint slides, audio or video materials). It is also called synchronous learning. This method requires the least amount of effort to convert materials (but instructors still have to prepare them).

Appropriate technology must be in place for both the learners and providers (e.g. software for the virtual classroom and good connectivity).

3. Impact of E-Resources on Library and Information Services

The Internet e-resources is transforming the library system and as well the way in which we view information sources. It has made simple and speedy purchase of information sources like books, journals and electronic publications. Many publishers catalogue tools like 'books in prints' as well as forms for ordering documents are available on the internet. The librarians need quick access to books, journals and electronic publications. Internet access is the simple and efficient method for access and updating the documentation and interface of catalogue of all libraries. The request for Inter Library Loan (ILL) can be sent via e-mail and the photocopies may be sent by post fax, via e-mail after scanning the documents. The development of information technology and the dissemination of Web environments have a dramatic effect on the user behaviors in information usage. The workflows from acquisitions to user services and the life cycle of electronic resources is quite different from that of print resources since it is characterized by access without holding the physical objects. As libraries build ever-larger collections of electronic resources, finding ways to manage them efficiently becomes a major challenge. The number of electronic journals, citation databases, and full-text aggregations held by most libraries has grown rapidly. Managing these electronic resources involves providing the library's user with convenient ways to find and access them and providing library staff with the tools to keep track of them. Most of the Library resources in the recent past are being made available in electronic formats such as e-journals, e-books, databases, etc. Libraries are moving from print to e-resources either subscribing individually or through consortia because of its advantages over print resources. Recent studies show that users prefer e-journals than the print. As licensing electronic resources has greatly increased in recent years, libraries have struggled to control this information in paper files, integrated library systems, separate databases stored on local computers or network.[2]

4. Utilities of E-Resources

- E-publishing may be less costly than paper.
- E-Resources are created in any file format like text, audio, video and images.
- E-resources are available for 24 hours of a day and save library space.
- The E-resources search is easy because of user friendly interface.
- They provide users faster, more convenient and anytime access from home, campus or library.
- E-resources can be accessed by the support of advanced search and retrieval system.
- The content can be reproduced, forwarded, modified and leading to problem with copyright protection and preserving authenticity.
- The electronic environment enables the library to integrate with other libraries and make use of their resources also.
- Those who have limited time to access to the libraries can effectively access to the libraries by dialing up process.
- The libraries provide access to very large amount of information resources.
- Libraries are focused on providing access to primary information.

5. Conclusion

The e-resources provide themselves various search options to the user and library manages. Using of e-resources enable the library to save space of library and time of the users. E-resources are useful for libraries as well as each and every users of the society who are starving to get a variety of information through the globe. The Developments in the information and Communication Technology services are available in the present made wonderful changes in the library operations. Its advantages are for technocrats, usage of the electronic products improve the knowledge of user. E-mails and RSS alerts carry the information for the individual to become aware of the user. Enhancement in Infrastructure like high speed network, Wi-Fi in the campus, LAN portals at various rights to use points in the campus and also in departments can be prepared to improve the practice effectively.

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Use Of Multimedia And Animation In Teaching

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Abstract

This paper tries to analyze the effects of multimedia and animation teaching on academic performance of students. As technology progresses so will multimedia. Today there are plenty of new media technologies being used to create the complete multimedia experience. Moreover it serves as an opportunity to create animated objects. One of the reasons that animations are now found so widely is that many people believe that animations can help learners come to understand complex ideas more easily. The process of teaching and learning gets a whole new experience when animations are used during the process. Thus animation can promote learner understanding.

Keywords:

Multimedia, radical changes, animation, traditional teaching.

Persuade Of Ict On Innovation

¹⁰ *A. Antony Sagaya Ruban*

Introduction

Technological developments always warrant transition to newer technologies by exposing the cost effectiveness of any mode of education programme. A lot of advancement in science and technology due to the industrial revolution, it develops all sphere of human kind and education is not an exception of that. Education is highly affected by those development and innovations, new issues and trends emerged education like mass media approach, use of ICT, individualized learning, group dynamics and e- learning have changed nature and dimensions of the education.

Meaning

Information and Communication Technology (ICT) is an umbrella term that includes any communication device or application including radio, television, cellular phones, computer network, hardware and software, and satellite systems, as well as the various services and applications associated with them, such as video conferencing, social networks, and distance learning. ICT is often considered a general purpose technology. It can be adapted to multiple applications. ICTs can be divided into two components, Information and Communication Infrastructure (ICI) which refers to physical Telecommunications systems and networks (cellular, broadcast, cable, satellite, postal) and the services that utilize those (Internet, voice, mail, radio, and television), and Information Technology (IT) that refers to the hardware and software of information collection, storage, processing, and presentation.

Modernization

Essentially, modernization denotes a dynamic process, a powerful movement from traditional quasi-traditional order to certain desired types of technology and the resultant changes in the social structure, value orientation, motivation, achievements and aspirations. It implies change in the value system and involves the substitution of old images and structures with new ones. Another important aspect of modernization is a new equilibrium to be reached and maintained. Any change in the society upsets various factors and thereby brings about many difficulties and problems. The old equilibrium gives way to a new one. Thus to change the society for setting up a new social order means in its trail a large number of problems-social, economic, cultural and political which demand immediate solution.

Modernization does not mean complete isolation or segregation from the past traditions. It must be built on the past reflection the needs of the present and vision of the future social order. India's prosperity and modernization must be based on the moral and spiritual values enshrined in its culture.

ICT in our daily life

Jobs

Information and technology has helped a lot in the field of jobs. IT industry introduced some unique and rare jobs which wasn't very popular even in late 1980. This field has appeared as a solution to increase the number of employments and reduce the number of unemployment in our society. IT industry created a lot of job facilities for people who have skills in IT. It has created jobs like Web developer, IT network administrator, computer game designer, IT technicians etc. IT industry also helped many people to become successful self-employer.

Education

The technology helped us in our education as well. This has introduced the easiest way of learning and teaching for both students and the teachers. It has also introduced us to know about modern discoveries and also historical things as well. We can use internet every where to different books and also we can watch videos on the internet to get more ideas about the topic that we want to research on. Now a day we are using e-learning and m- learning in the educational field.

¹⁰ *Ph.d. Research Scholar., M.S.University., Tirunelveli.*

Crime and Policing

IT has introduced a lot of things which prevents people committing crime. CCTV camera, GPRS system, using database for finding criminals' information are some unique thing which cannot be possible without the blessing of IT. In common days police uses GPRS to track someone's car, mobile phone if it has been stolen. Police uses CCTV camera to detect criminals' face. Fingerprint is another especial method with which the police can identify the thieves. This is making our life safer and very easy in many ways.

Retailing

IT has impacted on retailing and we are greatly enjoying the benefit of using IT on retailing. We are using IT on retailing which helps us to buy anything every day. We can use this facility to choose whatever we want at any time. We can choose range of items on the internet and we don't even have to go to a place to choose whatever we want. We can also reserve the items on the internet. We can pay for the items on the internet with a safe internet payment option which is PayPal. We can also choose products from different countries on the internet and buy them using the advantage of IT.

Money and Banking

IT has also showed its beneficial points on money and banking which helped us a lot to buy necessary things using E-commerce which includes online shopping, online selling etc. It also helped lot of companies to deal with other companies. We can use online money and banking service at any time. Which means people can use this benefit whenever they want from any part of the world. We can also go to different countries and use our same banking account to take money or put money on our account. This is possible because of the WAN (*Wide Area Network*).

Impacts of ICT

Positive Impacts

Lower communication cost: Using the Internet is cost-effective than the other modes of communication such as telephone, mailing or courier service. It allows people to have access to large amounts of data at a very low cost. With the Internet we do not have to pay for any basic services provided by the Internet. Furthermore, the cost of connection to the Internet is relatively cheap.

Reliable mode of communication: Computers are reliable. With the internet, information could be accessed and retrieved from anywhere and at any time. This makes it a reliable mode of communication. However, the input to the computer is contributed by humans. If the data passed to the computer is faulty, the result will be faulty as well. This is related to the term GIGO. GIGO is a short form for Garbage In Garbage Out. It refers to the quality of output produced according to the input.

Paperless environment: ICT technology has created the term paperless environment. This term means information can be stored and retrieved through the digital medium instead of paper. Online communication via emails, online chat and instant messaging also helps in creating the paperless environment.

Effective sharing of information: With the advancement of ICT, information can be shared by people all around the world. People can share and exchange opinions, news and information through discussion groups, mailing list and forums on the Internet. This enable knowledge sharing which will contribute to the development of knowledge based society.

Security: Information communication technology has proved helpful security wise in the creation of devices such as hidden cameras, webcam etc., which is used in offices, organizations, homes. These devices monitor places and the activities of people in such a way that crime is detected at its inception.

Information: ICT has equipped students with the knowledge of information communication technology thereby, adding value to the lives of the students. It is a major source of information to mass communication students in the University.

Mass Communication: As the name implies, mass communication involves communicating to a large audience. Schools and businesses make use of electronic communication to facilitate the activities of

their institutions e.g. e-mail and e-newspapers to communicate to a large number of people at the same time.

Storing Information: Information technology has created electronic storage systems to protect valuable records. Storage systems, such as virtual vaults, keep information safe by only allowing authorized company staff or individuals can have access, withdraw, add or change the documents. In times of technological disaster, IT security engineering systems protect electronic information from being hacked or wiped out. Electronic security engineering ensures that valuable records remain untouchable.

Fast Delivery: Communications between businesses are now faster because people no longer need to send a letter which takes about 24 hours. They can send an instant notification for a fraction of the cost which saves costs and man power for delivery. This therefore reduces postal costs, postal staff, and mail sorting and paper costs.

Negative Impacts

Job Loss: Manual operations have been replaced with automation which has economic and social effects such as loss of income and status.

Society: ICT has negatively affected our society by causing a digital divide between those who can access information and those who cannot receive education and understanding due to the vast amount of misleading and incorrect information.

Loss of Privacy: Users of social networking run the risk of lack of privacy in the sense that known and unknown people can assess their accounts or sites where they can get their personal private and sensitive information.

Reduced Employment: In the days before ICT, people were employed as messengers, cleaners, laborers in construction sites, e.t.c but with the advent of technology, machines have replaced such jobs previously done by man. These illiterates have been rendered jobless leading to unemployment.

Conclusion

New relationships that technologies, such as ICT, engender can encourage and support innovation and enable integration of ideas, values, and cultures in ways that move societies forward. But technologies can also reinforce the isolation for those who lack access and skills, which hampers their economic development and participation in culture and society. The interactivity of modern ICT marks a new stage of innovation. These technologies are being used in ways that reinforce and alter existing relationships or create entirely new ones.

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A Study On Use Of Multimedia And Animation In Teaching

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INTRODUCTION

MULTIMEDIA is content that uses a combination of different content forms such as text, audio, images, animation, video and interactive content. Multimedia is the presentation of computer controlled interactive information using the combinative of text, sound, picture, animation and video. The term multimedia can be define as medium with multiple content form the basic element of multimedia or computer are: movies, animation, sound, text, still images, special effectives basic stages in multimedia planning and costing this stage of designing and producing testing delivering. **ANIMATION** is the process of making the illusion of motion and change by means of the rapid display of a sequence of static images that minimally differ from each other. The illusion as in motion pictures in general is thought to rely on the phi phenomenon.

Usages and function of multimedia animation in Teaching

Typical usages

- ✓ To attract attention
- ✓ To inform about the state of process
- ✓ Demonstration's
- ✓ Interactive simulations

Pedagogical functions

- ✓ Motivation, get students interested in some phenomenon and to
- ✓ Explore it.
- ✓ Representation, help to support mental representation Organization
- ✓ Interpretation, prologue cognitive conflicts that make the students think.

Objectives

The objectives of this study are to:

- Determine the availability of instructional multimedia in the faculties of Arts and Education for teaching and learning.
- Determine the pattern and frequency of use of multimedia by lectures in these selects faculties for teaching and learning.
- Investigate the adequacy of multimedia facilities for teaching and learning in these faculties
- Identify factors, if any, which limit the use of multimedia by the university lecturers in the faculties

Graphics and Animation:

Refer to the Holon College Logo section of the Web Style Guide for information on proper use of the Holon College logo on websites. Make file sizes for graphics and animations small using an image editing software program (do not resize images by changing the height and width attributes of the tag). More about Graphics. Use graphics or animation where they add value to the web page. Do not use graphics or animations just because you can or you think they are cute or cool. All content on a web page should provide information or otherwise add value to the page. Animated graphics can be annoying, distracting, and can cause problems for site visitors sensitive to movement.

SCOPE

Multimedia course is the field related to computer controlled integration of texts, graphics, drawings, audio and animation. The information, content in the multimedia can be represented through digitally in the contrast to traditional media. The animation industry in India is expected to grow at a pace faster than the IT industry's animation as a career option is a field where you can fulfil

your dream of “enjoy-as-you-work”, feel satisfied at the end of your day and get praise from your clients as well.

Advantages:

- ✓ The strength of multimedia is that it uses the natural information processing abilities that we already possess as humans.
- ✓ Our eyes and ears, in conjunction with our brain, form a formidable system for transforming meaningless sense data into information.
- ✓ The old saying that “a picture is worth a thousand words” often understates the case especially with regard to moving images, as our eyes are highly adapted by evolution to detecting and interpreting movement
- ✓ One advantage of multimedia courseware over the text-based variety is that the application looks better.
- ✓ If the courseware includes only a few images at least it gives relief from screens of text and stimulates the eye, even if the images have little pedagogical value.
- ✓ More often than not, the inclusion of non textual media into courseware adds pedagogical value to the application.

Disadvantage

- Multimedia requires high-end computer systems. Sound images, animation, and especially video, constitute large amounts of data, which slow down, or may not even fit in a low-end computer.
- Unlike simple text files create in word processing; multimedia packages require good quality computers.
- A major disadvantage of writing multimedia courseware is that it may not be accessible to a large section of its intended users if they do not have access to multimedia-capable machines.
- Development in multimedia is very high and the process of developing effective multimedia takes time.
- The user must possess a multimedia level of computer literacy in order to exploit the capacity of this medium for learning
-

Difference between multimedia and animation:-

Multimedia	Animation
Multimedia is obsolete right now since the migration of many of media types to web but multimedia means the mixture of images video and sound within same design.	Animation is the art of creating movements usually work an things not move at are: line animation(cartoon) 3D computer animation (CGI)
Multimedia design is the general term for several platforms can use for communication and to get message across(e.g. print, branding, package design)	So animation is considered to be under the umbrella of multimedia design.

Multimedia is a platform for many types of visual communication such as sound video images touch interaction etc.,	Animation is the form of art of which when it is manipulated edited and played at a certain speed also known as frames per second produces visual movement and it involves art drawing.
It use the combination of different content forms multimedia includes a combination of text, audio, still images, animation, video or interactivity content forms. The term 'rich media' is synonymous for interactive multimedia	It is the process of creating a continuous motion and shape change illusion by means of the rapid display. It includes analogue media, such as a flip book video tape or on digital media.

Conclusion

It is true one of the ultimate goals of multimedia language teaching is to promote students motivation and learning interest, which can be a practical way to get them involved in the language learning, context creation of ELT should be based on the openness and accessibility of the teaching materials and information. Concerning the development of technology we believe that use of multimedia English teaching will be further development.

A STUDY ON USAGE OF E-LEARNING
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INTRODUCTION

E-Learning is a very useful tool in medical education at both the undergraduate and postgraduate levels, as it can help to achieve learning objectives which doctors need before being considered competent. -Learning offers several advantages which include enabling the learners to use the tool at a convenient time and place and to control the learning sequence, and it can therefore be much personalized. It also offers educators the opportunity to standardize and easily update content. There is also evidence that internet-based learning is cost effective when compared to the traditional learning methods. This, of course, depends on the cost of the outlay of the e-learning system and the possible savings on travel and accommodation. It is known that web-based learning is as effective as traditional learning in imparting knowledge to the user.

Benefits of E-learning

There are some benefits in which e-learning has transformed the landscape of learning and development. When compared to the traditional mode of classroom learning, there is clear evidence that e-learning brings:

- ✓ It's what learners want - really
- ✓ Faster delivery
- ✓ Lower costs
- ✓ More effective learning
- ✓ Lower environmental impact.
- ✓ better attitude toward the e-learning format and training in general
- ✓ improved scores on tests, certifications or other evaluations
- ✓ increase in number of learners who achieve 'mastery' level and / or 'pass' exams
- ✓ greater ability to apply the new knowledge or processes on the job
- ✓ better long-term retention of information

Some other benefits are

There are several benefits to e-learning whether you choose to use it on its own, or to enhance your existing in house training.

It's cost effective and saves time:

By reducing the time taken away from the office, removing travel costs and doing away with printed materials, online learning helps you to save money and increase workplace productivity. It also means your staff will be happier and focused.

Learning 24/7, anywhere:

Many face to face courses only operate within normal office hours. By allowing staff to complete the course when and where they like you can make sure disruptions to your busy working schedule are minimized. This also means that your staff will be happier because they don't need to travel to specific training centre's, and if they have important work to catch up on mandatory training can be done outside of office hours in exchange for lieu time. Most of our courses have an average learning time, and our CPD approved courses allow learners to print out certificates of proof.

It makes tracking of course progress a breeze:

The most important aspect of using computers for training is that it with a well implemented Learning Management System (LMS) makes it easy to track and prove progress for your staff and learners. This can be essential for our most popular courses where proof of mandatory training is required.

It's discreet:

Not everybody feels comfortable learning in a large group, especially if they find something hard to understand that co-workers have no problem with. E-learning allows each individual to tackle the subject at their own pace, with interactive tasks being set in place to ensure a thorough understanding throughout each module.

What is Rapid e-Learning?

Rapid Learning generally refers to the production process of creating e-learning courses quickly and effectively without having to use overly complicated software or programming techniques. Courses built this way can be concise for the learner and fairly swiftly put together for the course provider – this can be an important factor, as information and training on specialist subjects often need to be imparted in the most efficient and up-to-date way as possible.

In short, Rapid e-Learning is the perfect way to keep up with training your staff in new products, policy changes, system upgrades or anything else you need to get out there fast!

Please contact us require a demo of our rapid e-learning courses.

Doesn't it also mean faster learning?

More recently, some companies have started using the term to refer to the speed at which a course can be completed, and this is sometimes referred to as 'Bite Size' learning. Good examples of this bite size courses are those which can be broken into ten minute sections for learning on the go, such as video training. If a tight budget, Rapid e-learning can be as simple as capturing a Power Point presentation and adapting it into a SCORM framework to use with an LMS; however this form of e-learning is rarely effective as presentations are designed for that reason – to be presented E-learning should be engaging for the user to make sure they absorb the information.

Should I come to an expert?

There are several software packages available that can make building simple e-learning courses fairly painless for a non-professional and this benefits everyone; however, e-learning is different from regular face to face training, and successful communication depends on the provider understanding the principles of delivering courses with engaging design and content management. To use an analogy, all drivers should know how to change a tire, but not everyone can be a mechanic. Sometimes it is desirable for an organization to have some in-house provision for producing e-learning courses in this way, so here at Virtual College we work with a number of clients in different ways. Some choose to give us course materials that are then converted into e-Learning by our expert team, whereas other choose to use our training resources and develop their Rapid e-Learning in-house, occasionally coming back to us for guidance or specific elements when needed.

How do I start creating courses?

There are a number of tools on the market that exist to capture screens and enhance Power Point presentations at the click of a mouse. Tutorials are available online to help the more tech savvy individuals out there. Here at Virtual College, we offer a variety of services to help our clients get started with developing their own rapid courses, ranging from training sessions through to bespoke course development by our in house experts.

Virtual College's Rapid e-Learning Development Service.

We're always happy to offer training and advice to help we produce our own courses, and we offer a number of full development support services to help we create the best training for our needs. Whatever stage we are at in your e-learning journey, call us today to help it make the next steps.

Services include:

- Creation of courses from existing materials
- Concept development
- Storyboarding
- Resource curation
- Course development from concept to finished product
- Professional voice over recording facilities

DIFFERENT TYPE OF E-LEARNING

There are fundamentally two types of e-Learning. They are

1. Synchronous, means “at the same time,” involves interaction of participants with an instructor via the Web in real time. For example – VCRs or Virtual class rooms that are nothing else but real classrooms online. Participants interact with each other and instructors through instant messaging, chat, audio and video conferencing etc and what’s more all the sessions can be recorded and played back. Its benefits are:

- Ability to log or track learning activities.
- Continuous monitoring and correction is possible
- Possibilities of global connectivity and collaboration opportunities among learners.
- Ability to personalize the training for each learner.

2. Asynchronous, which means “not at the same time,” allows the participants to complete the WBT (Web-based training) at their own pace, without live interaction with the instructor. Basically, it is information that is accessible on a self-help basis, 24/7. The advantage is that this kind of e-Learning offers the learners the information they need whenever they need it. It also has interaction amongst participants through message boards, bulletin boards and discussion forums. These include computer based training,(CBTs) modules on CD-Rom’s, Web based training accessed through intranet (WBTs) or through well written articles and other write ups. Its advantages are:-

- Available ‘just in time’ for instant learning and reference.
- Flexibility of access from anywhere at any time.
- Ability to simultaneously reach an unlimited number of employees.
- Uniformity of content and onetime cost of production.

A new form of learning known as blended learning is emerging. As the name suggests it is an amalgamation of synchronous and asynchronous learning methods. Using both online training through virtual classrooms and also giving CD’s and study material for self study is now being increasingly preferred over any single type of training.

Advantages

1. Scalable

E-learning enables us to quickly create and communicate new policies training ideas and concepts.

2. Capacity and consistency:

Using E-learning allows educators to achieve a great degree of coverage for their target audience and it ensures that the message is communicated in a consistent fashion.

3. High learning retention:

Blended learning approaches result in a higher knowledge retention rate. It also helps that course work can be refreshed and updated whenever needed.

4. Time and Money savings:

E-learning reduces time away from the workplace, eliminates the need for travel and removes the need for classroom-based training.

5. Reduction of the carbon foot print:

By leveraging e-learning for online testing. The need for printing out paper based assessments is reduced in the fact it’s practically eliminated altogether.

Disadvantages of eLearning

Potential drawbacks are that e-learning can be:

- **Technology dependent:** learners will need access to a machine of minimum specification as dictated by the e-learning supplier or access to a service with a high bandwidth to transfer the course materials in a timely way.
- **Material Incompatibility:** some materials designed for one particular system will not function properly on another.

- **Unsuitable for Certain Types of Training:** any skill that relies heavily on inter-personal contact although these courses could be supplemented by e-learning.
- **Unsuitable for Certain Types of Learners:** e-learning requires a high-level of self-discipline and personal time management. E-Learners need to be highly self-motivated to take full advantage of the medium as often the online learning experience can be impersonal. Working through 'packaged' programmer can be irritating.
- **Reliant of the Quality of the Content:** It is too easy for some institutions to defer the photocopying costs onto the learner by placing all lecture notes and course handouts online.
- **Expensive:** start-up cost of an e-learning service is expensive and the cost of production of online training materials is very high. Teachers must be confident that the extra costs are balance with the benefits of delivering a course online
- **Reliant on Human Support:** e-learning is still dependent on help on either the course materials or the software.
- **Social/economic disadvantage:** can limit or prevent access by some student groups.
- **No Match for Face-to-Face Teaching:** Electronic communication does not necessarily provide a good match for face-to-face communication and is more linear than face-to-face discussion.
- **Too Reliant on IT Skills:** learners may have limited IT skills, or be uncomfortable with electronic communication and need to learn how to use the medium effectively.
- **Disabilities:** Students with visual or physical impairments may be disadvantaged.
- **Inflexible:** Flexibility may be lost as adjustments to the course in response to student reaction are not easy to make once the course is underway.
- **Pedagogically Unsound:** The electronic environment does not per se offer a pedagogically enhancing learning environment.

Conclusion

E-learning is becoming increasingly prominent in tertiary education. All available evidence points toward growing enrolments and provision albeit from a low starting point. However, after the hype of the new economy, growing disenchantment with e-learning has replaced over-enthusiasm. Failures of e-learning operations have, at least temporarily, overshadowed the prospects of widened and flexible access to tertiary education, pedagogic innovation, and decreased cost that was once embodied by e-learning. So where do we stand after the end of the hype of the new economies.

Social Media And Teacher : Todays' Trend

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Introduction

Using social media websites is among the most common activity of today's teaching professionalism. Any websites that allows social interaction is considered a social media site including social networking sites such as Face book, MySpace, flicker, YouTube, Google+, Tagged, twitter, LinkedIn, Tumblr, Kik, Vine, Whatsup and Snapchat. If teachers want to better understand how social media can affect a student's desire to learn, they must first look inside the mind of a student. They are very good interest in the social media, some time it will better to understand, some times it will worst to their behaviours. All the social media should rule the lives of most middle and high school students. Walk through the halls of any high school during lunch or passing period and you'll see a massive number of students with their eyes glued to their phones. More than nine out of every 10 teenagers has a social media account. To comprehend why students spend so much time on social media, the compelling appeal of Facebook, Instagram, and the like has to be understood. With that understanding, teachers should be able to consider the possibility of using social media to enhance learning.

SOCIAL MEDIA

It refers to websites and applications that enable users to create and share content or to participate in social networking. Sometimes it referred by students community Social media are [computer-mediated](#) tools that allow people or companies to create, share, or exchange information, career interests, ideas, and pictures/videos in [virtual communities](#) and [networks](#).

TYPES OF SOCIAL MEDIA

There are many types in this, but some of these are familiar to everybody. By this they are classified into six types in social media, they are

Social Networks:

It means services that allow one to connect with other people of similar interests and background. Usually they consist of a profile, various ways to interact with other users, ability to setup groups, etc. eg; Facebook and LinkedIn.

Bookmarking Sites:

It deals with services that allow one to save, organize and manage links to various websites and resources around the internet. It allow to "tag" links to make them easy to search and share. eg; Delicious and Stumble Upon.

Social News

It shows the services that allow people to post various news items or links to outside articles and then allows its users to "vote" on the items. The voting is the core social aspect as the items that get the most votes are displayed the most prominently. The community decides which news items get seen by more people.

eg; Digg and Reddit.

Media Sharing

It refers to services that allow one to upload and share various media such as pictures and video. Most services have additional social features such as profiles, commenting, etc.

eg; YouTube and Flickr.

Microblogging

It means services that focus on short updates that are pushed out to anyone subscribed to receive the updates.

eg; Twitter.

Blog Comments and Forums

Online forums allow members to hold conversations by posting messages. Blog comments are similar except they are attached to blogs and usually the discussion centers around the topic of the blog post.

eg; blogs and forums.

SOCIAL MEDIA SYSTEM

Social media has inexpensive and widely accessible electronic tools that enable anyone to publish and access information, collaborate on a common effort, or build relationships. Social media depend on mobile and web-based technologies to create highly interactive platforms through which individuals and communities share, co-create, discuss, and modify user-generated content. They introduce substantial and pervasive changes to communication between businesses, organizations, communities, and individuals. These changes are the focus of the emerging field of techno self studies. Social media differ from traditional or industrial media in many ways, including quality, reach, frequency, usability, immediacy, and permanence. Social media operate in a dialogic transmission system. This is in contrast to traditional media that operates under a monologue transmission model.

AVOID DIFFICULTY

Teacher should know the strength of social media how it works on the student. They should aware the modern trends of media it should help in the teaching learning process. In the modern world or e-world the student are brilliant than the teacher. Because they are ready to learn the surroundings activity, it would be healthy or not bad. So the teacher should know the minds of student. Now a day the mobile communication should bring the good and bad things to the students easily. If a child had a mobile then it would be equal to child was missing from the parents or anybody. So the parents and teachers should keep the children away from that, but our concept is to know the good things of social media then it will be useful for their learning.

TO KNOW THE STRENGTH

Social networking is a powerful tool for teachers that can be used either for personal or professional means. On a personal front, social networking lets mix with people from all over the world. It helps maintain teacher-student relationships easily. Now, instead of having to call other teacher and force a conversation of a decent length, one can simply comment of others idea, photographs to study and state wise curriculum or just drop them a message online. This aids communication, especially with teachers and other school teachers who works in another type of school or another board. Every teacher should know their strengths because it will help to teach or learn some ICT learning. They are ready to prepare themselves then only it will be succeed to teach in their classroom. The students are eager to learn new ideas, thoughts and facts from the teacher. So they are ready explaining in a real life situation.

ADVANTAGE OF SOCIAL MEDIA

Social networking is as important for teachers. While, social media is a handy tool in the classroom, it can be as beneficial outside the classroom. There are a number of ways that one can take advantage of networking.

Sharing ideas

Social networks allow teachers to share idea with each other. Comparing notes on classroom teaching techniques and learning styles can help to enhance the learning experience in their classroom. Teacher can also share lesson plans and visual -aid ideas.

Partnership with other schools

Social networking allows teachers to connect with teachers in other school. These partnerships are useful as they keep you abreast of changes in curriculum and content in others states and maybe even other countries.

Getting information

Teachers can also use social networking to connect with teachers and other persons from another country. This can help them get accurate information on other countries and not just use content from the internet that is often outdated. For example, one can now plan a virtual field trip, as discussed on our website earlier, with ease and accuracy. If teacher is planning a virtual trip to another country, they could get in touch with people from that country and understand their lifestyle, food habits and culture. They could also have them live via webcam during the virtual field trip and let them answer questions that the students may have.

Professional development

Social networks help you know of seminar, conferences and other development workshops in their area or online. Touching base with individuals from those entities would help them connect with and keep in the loop.

The value of contacts

While this is often not talked about, contacts are key to professional development. The world today revolves on who you know. Establishing relationships with others in different school can help you enhance teacher career. Getting a job is generally a lot easier if someone knows good teacher and recommends to other. Social networking for teachers, as it is often called, can be used to build contacts with teachers from others school and help keep their options open.

PEN DOWN...

In a 2014 survey of 1000 teachers just one in five said they are touching with students through social media. There are six different types of social media; there can be overlap among the various services. For instance, Facebook has microblogging features with their “status update”. Also, Flickr and YouTube have comment systems similar to that of some blogs. So the current trends of social media should cover minds of younger generation, the teacher should aware in ICT level then only it will helpful to society.

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UTILIZATION OF ELECTRONIC GADGETS IN TEACHING

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Introduction

Technology can become the “wings” that will allow the educational world to fly farther and faster than ever before -- if we will allow it– Jenny Ariedge

In a classroom of thirty children, there are going to be several children with different learning styles and academic strengths and weaknesses. A teacher is woefully unequipped to handle all learning styles or weaknesses. It is virtually impossible for a single teacher to accommodate all methods of learning, when he or she is responsible for teaching a large number of children. But it is possible for a teacher to teach all types of learning styles by using electronic gadgets.

Electronic Gadget – The concept

The origin of the word “gadget” traces back to the 19th century. The gadget is a small, unique-use mechanical or electronic device (www.edtechnimagazine...). According to Oxford Dictionary, there is anecdotal (not necessarily rule) evidence for the use of gadget as a place holder name for a technical item whose precise name one can't remember since the 1980's. A gadget is a small tool such as a machine that has a particular function, but is often thought as a novelty. TV, computer, laptops, mobiles, pagers, digital camera etc., are well known electronic gadgets. A mini app that stays on screen to provide quick functionality such as search box clock, weather, calculator and stock market are also said to be gadgets. Gadgets are called widgets on smartphones, tablets, the mac, desktop and other environments.

Need for using the electronic gadget in teaching

“In learning you will teach and in teaching you will learn”

–Phil Collins

Learning through interactive gadgets in schools is as fun loving and watching a favourite movie or a music video. Due to new and advanced technology, standard of teaching and learning has changed a lot. In this century, teaching and learning in schools with electronic gadgets is bit challenging for teachers and students. Making use of electronic gadgets in the classrooms such as ipods, smart board, digital electronic devices, tablet, PC, etc satisfies the growing standard of technology and prepares the life of the students. Almost three-quarters of Americans, 73% believe that investing in innovation and advanced technology sciences in education is the key to the country's long-term success (Harris Interactive, 2009). The mass array of multimedia learning devices such as the iPad, iPhone, and Kindle hold the potential not only to replicate traditional textbooks but also to provide for a social interface component.

Advantages of using electronic gadgets in teaching:

The electronic gadgets make the students to think beyond their books and explore the learning skills as much as they can.

Introduction to gadgets in schools has changed the entire scenario of teaching and it is beyond the teacher's expectation. Nowadays instructions to the parents are sent through E-mails or SMS through phones. It makes an effective communication between the school and the stakeholders. It also helps the students to learn from the gadgets and grow their learning skills. Today's most of the

schools system have technology standard that all students must attain throughout their educations. It helps the students to prepare and possess reasonable knowledge for the entire academic year.

It is not only useful for the students but it is also helpful for teaching staff. The teachers are given proper training to use these advanced gadgets to teach the students in an effective way. Learning with the advanced technology motivates the students to think beyond the notebooks and assist them to improve their learning skills. Moreover it is easy, portable and convenient to use.

These gadgets have made the learning environment more engaging and interesting. However introduction of high-tech digital devices in schools makes teaching work easier than before. Due to high-tech device, it helps to improve the quality of education in today's schools. Kids enjoy all the required privileges of learning with electronic gadgets.

Limitation of Electronic Gadgets in the Classroom

The students were asked to switch off their phones and laptops closed for the duration of class. The reasons behind these limitations typically have concerns about students attention spans; a desire to prevent multitasking, keep them off of social media sites and limit distractions to others. While it is inevitable that students will be distracted at times, putting constraints on the use of personal technology devices will not solve this problem. The maximum span of attention of a student is (age +3) minutes. Restricting use of device in the classroom is moving away from the trend of improving education by integrating technology.

Technological Gadgets used in the Modern Scenario

Tell me and I forget, Teach me and I remember, Involve me and I learn.

– Benjamin Franklin

As per the above words, the technological equipment involves the students within the frame of the class. Here are some of the electronic gadgets used in the modern scenario.

Trust Wireless

In the past, teachers were stuck at the chalkboard or whiteboard while giving presentations, but thanks to wireless presenters, they're now free to roam the room while executing a spot-on (literally) presentation. This impressive laser pointer fits easily in one hand, with the index finger controlling the clicks. Thumbrests on a trackball atop the device and no need to buy any accompanying software as after pressing 'connect' on the USB receiver. Then on the presenter one can interact wirelessly. It has 2.4 GHz wireless operation and range of upto 10 metres.

Wacom Inkling

Taking notes is a key part of learning, but also of teaching. And in a digital age, pen and paper can only go so far. The linking is a digital sketching tool from Wacom that lets one create drawing on any type of papery surface and transfer them directly into the windows.

LCD projectors

This device is powered by a laptop/computer via USB and can reach 100 lumens of brightness, and is ideal for Powerpoint presentations.

Teleconferencing

Teleconferencing is electronic communication between two or more people at a distance. Today, teleconferencing may connect multiple locations and can be divided into three major types-audio, video and computer. These types can be combined for an almost endless set of applications. College and University users have discovered that teleconferencing enables them to extend the budget dollar;

extends educational opportunities to distant locations; accommodates a variety of classes, from college courses to continuing education and public service programmes; and provide a flexible format for meetings.

Audio graphic teleconferencing

It is blending video and audio teleconferencing characteristics “Audiographics” refers to the transmission of print and graphic information over telephone lines to complement voice communication with visuals. Audio graphics systems include a variety of devices: electronic pens, blackboards, and tablets, as well as computer systems, slow scan television, microfiche, telewriters, and facsimile machines.

Electronic Blackboard

Although not widely used, a potentially useful educational device is the electronic blackboard. The blackboard converts writing to audible tones which are transmitted over telephone lines, received at one or more locations, and displayed upon a television screen. Tariffs vary but costs for both send and receive capabilities.

CONCLUSION

Teachers can give a variety of teaching methods by using the electronic gadgets in the teaching process effectively. The art of teaching is the art of assisting discovery. According to the Piaget, “Senses are the gateways of knowledge”. The technological gadgets made more than one sense to involve in the learning process. Electronic gadgets in the field of education make the students to involve in the educational activities and increases the attention and makes students to learn unconsciously.

“Technology will never replace great teachers,

but technology in the hands of great teacher is transformational”

– George courous

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USES OF MULTIMEDIA IN TEACHING LEARNING PROCESS

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Introduction

Multimedia applications have substantially influenced education. They give teachers an excellent chance to demonstrate and visualize the subject matter more clearly and comprehensibly, as well as also enabling them to prepare study material for students which optimizes their study habits. Along with large software products dealing with a wide spectrum of objects developed by a team of professionals there are also various smaller programs dealing with objects appropriate to course subject matter created on a script given by the teacher with regard to students' needs.

Multimedia Presentation

The paper one application and animations prepared to intensify self-preparation of students studying the subject *Algorithms and Data Structure* are introduced and their benefits are discussed. At the end advantages of the professional virtual learning environment containing such study material are emphasized as well.

A general definition of multimedia

Multimedia is in essence a presentation of information that incorporates multiple media such as text, audio, graphics, and animation. The representations can be redundant, incorporating the same content, or complementary, offering additional information. Multimedia need not be computerized, but computers offer some of the most seamless multimedia presentations. Moreover, digital multimedia, such as a simple CD-ROM, can offer teachers greater ease of presentation.

Multimedia Applications for the Classroom

There is a clear disconnect between the media students are accustomed to using outside the classroom and the media they predominantly use within the classroom. Students spend copious amounts of their free time socializing, shopping, and even studying on the Internet, where they are flooded with text, images, video, animation, and sound in what is a complex multimedia environment. The younger generation is intimately familiar with multimedia, accustomed to receive and share information in a range of formats. In contrast, students spend most of their time in the classroom viewing printed text and listening to a teacher. This disconnection is troublesome. While students are accustomed to have a range of means to communicate and process information outside the school, they must conform to a more restrictive media environment within school. Printed text is one-size-fits-all, but students' learning strengths, needs, and interests are all over the map. Thus, the traditional print-driven curriculum raises a number of barriers to access and learning.

Integration of multimedia into instruction can help to reduce curriculum barriers and improve learning for all students. This article provides a basic introduction to multimedia and describes how it can be used to support student learning.

The easiest way to create a multimedia presentation is in Microsoft PowerPoint. You can add in video, a soundtrack and also a reasonable degree of animation. By far the biggest advantage of making multimedia presentations in PowerPoint is that it is easy for anyone to be able to edit the presentation.

Giving students an opportunity to produce documents of their own provides several educational advantages.

- ❖ Students who experience the technical steps needed to produce effective multimedia documents become better consumers of multimedia documents produced by others.
- ❖ Students indicate to learn the material included in their presentation at a much greater depth than in traditional writing projects.
- ❖ Students work with the same information from four perspectives:

There is another aspect to develop multimedia documents that empowers students. Students quickly recognize that their electronic documents can be easily shared. Because of this, students place a greater value on producing a product that is of high standard. An audience of one—the teacher—is less demanding than an audience of many—particularly one’s peers. Students quickly recognize that publishing a multimedia document that communicates effectively requires attention to both the content and the design of the document.

Animation for education

Educators are enthusiastically taking up the opportunities that computer animation offers for depicting dynamic content. For example, PowerPoint now has an easy-to-use animation facility that, in the right hands, can produce very effective educational animations. Because animations can explicitly depict changes over time (temporal changes), they seem ideally suited to the teaching of processes and procedures. When used to present dynamic content, animations can mirror both the changes in position (translation), and the changes in form (transformation) that are fundamental to learning this type of subject matter.

Merits of Using Animation Effects in Teaching

1. Communication Skills

The traditional pen and paper essay-writing format isn’t for every student. Animation is a brilliant and innovative new way to encourage children to communicate stories, ideas and concepts in a creative and original way. It can be particularly useful as a tool to encourage the creativity of students who find spelling and grammar a challenge, because it liberates them from the anxiety of always worrying about technicalities and enables them just to concentrate on the story instead. Domo is a great animation tool to encourage students to get started, as it provides a clear, colourful cartoon environment but also introduces ready-formed characters children can relate to, with their own personalities and habits, which give a helpful springboard to possible plot ideas. Another brilliant storytelling tool is Myths and Legends, which allows students to create animations for popular historical stories and myths, with the extra added bonus that they can also record a narration soundtrack to play over the top, adding a whole new level of creativity and communication practice! Teachers have to sign up first to create an account for students to use.

2. Building Bridges

Thanks to the edtech explosion, creating animations is by no means a solitary pursuit. The process on many websites now also involves sharing your creations with your peer group, whether within the classroom or further afield by making students’ movies visible to others using the same tool. The opportunities this provides for collaboration with students from all over the world should not be underestimated, and it carries the additional benefit that a language barrier can be immediately overcome through the medium of animation, so it is a fantastic starting point for building up ties and a sense of community across borders with your students. Kerpoof is a great animation site for this as it allows students to link back to the url of what they have created, and also has options for different

types of animation, including a letter which can be specifically addressed – perhaps to an animated penfriend!

3. Self-expression

For many students, self-expression can be a huge challenge, and traditional methods of art such as drawing and painting, while hugely enjoyable for some, can feel difficult and worrying for those who don't necessarily have a huge amount of natural artistic talent. But the beauty of animation is that ready-made characters can be placed into pre-drawn environments, while students still retain the creative reins by choosing everything from plot to speech bubbles. Sites like the Zimmer Twins are an excellent example of this perfect balance between pre-prepared materials and lots of free creative choices. Better still, it has a special website designed specifically for use in schools, with class management tools built in for teachers.

4. Technical Skills

While there are a range of fantastically simple animation tools available for younger children, it can also be a great gateway for older students to learn much more difficult technical skills too. The Anim8or tool is the perfect example – it allows students to use algebraic and calculus functions to create 3D animations and also teaches them a range of useful computer skills. A guide is available to download so students don't have to be experts before they begin!

5. Presentation Skills

The other brilliant thing about animation is that it provides an exciting and dynamic platform to encourage students to give interesting, engaging class presentations. Gone are the days of students falling asleep in the back of the class while their classmates stood at the front of the room, reading from a sheet of paper! Animation is a great way to encourage students to put greater effort into their presentations, making slide shows, visual explanations of concepts and really visually connecting with their audience, a great skill for the future. The excellent Go Animate 4 Schools website is specifically designed for this kind of work, and provides a safe, secure environment specifically made for use in schools.

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Usage Of E-Library Resources

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Introduction

It's an electronic or online library where one can have access to books, journals, novels, articles, or any other information over net. An Electronic Library is the same thing -- but the term should be deprecated, because the term "electronic" is less precise: it might include analogue data formats, or it might refer to the subject of "electronics". An electronic library allows users, to read or refer any published items from their residence or office or college via internet. Users are no need to visit the library directly for their reference. A-Z of library jargon of Oxford Brookes University define the term E-library as section of the library web pages which provides access to data bases, electronic journals, electronic books and electronic newspapers.

National Diet library, Japan is defined the "electronic library concept" as "a library which provides primary and secondary information electronically through communications networks and the basis for this purpose". Putting emphasis on the library as a mode of service, electronic library service, including in-library services, is broadly defined as "service which enables library users to directly access electronic data via telecommunications networks".

E-library

E-library aims to remove the four walls that a library is confined to. No more locked cabinets or waiting for a copy of a title you are interested in. The digital copy is available to any number of readers so the constraint of a physical copy does not apply. More importantly, our main is that the library should become an integral part of the classroom. Today, students have to do projects and assignments which the teacher can now easily give knowing that titles are available within the digital library and accessible to all children in the classroom. Similarly, topics can be discussed within the classroom from what is available in the library. So the rich content a library offers which till now was restricted to four walls is now available across classrooms and mobile devices. The equity of access to knowledge is an important advantage that the digital library provides.

Uses of e-library Resources

Now the academic libraries are shifting to the traditional print resources into e-resource and maintain as institutional repository. Those resources are theses and dissertations and other innovative academic work done by faculty or students. Their sources of institutional repository are distributing via internet or intranet to its user community.

- E –Libraries are the best tool for providing online resources for research which will make easy to it user.
- Retrospective search is easy and most convenient than print resource.
- Literacy increases when searching made by the educators.
- Searching of index is also easy.
- It supports for searching with the combination of keywords.
- While searching made by patrons for their project retrieve a manageable amount of content, quickly and easily.
- Provision for simultaneous access to multiple file.
- E-libraries facilitate to it patrons for research solution.
- Provision for printout and saved the down load items for future reference.
- The distance learners are also searching their requirement from e-library.
- The simplest functionality like point-and-click promotes the users interest.

E-learning in Digital Libraries

Most of our university libraries are now automated and many scholars have e-mail accounts. Communication and data transfer or interchange has become easy with the help of Internet and email attachments. The Infilbnet program for university libraries is expanding in every dimension.

- The concept of e-learning can be incorporated into a digital library system. For instance, in an e-learning environment the contents are truly dynamic. Any piece of information comes with a system that equips a user to test his level of knowledge. Libraries have adapted accordingly to enhance the learning process.

Conclusion

Electronic libraries are the heart of the academy, with the aim of more effective education in future. It contribute knowledge and it promotes life-long learning.

e-library must be more effective while using in the higher education. Education is an important force in the advancement of civilization. Its success depends upon the sharing of information.

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Utilization of ICT for Profound learning chemistry

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INTRODUCTION:

“Teacher need to understand the learning needs and different learning styles of our students to equip them to contribute to using the tools of chemistry to improve the human condition and that of our environment, and to help each one of them understand the crucial role that chemistry plays in our lives” . However, learning will not happen until the learner is engaged with the subject matter that the instructor intends. The important factors that must always be taken into account when teaching all subjects are (a) what the learner already knows, (b) the abilities of the learner, and (c) the motivation of the learner . Providing students with activities that are appropriate for their ability and encourage engagement will motivate them to learn. The old Chinese proverb remains appropriate for today's classroom and students: Tell me, I'll forget, Show me, I'll remember. Involve me, I'll understand. (Chinese Confucian philosopher Xunzi 312-230 BC)

According to Daniel (2002), ICT has become within a very short time, one of the basic building blocks of modern society. According to UNESCO (2002), ICT may be regarded as the combination of ‘Informatics technology’ with other related technology, specifically communication technology. The various kinds of ICT products available are having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counseling, interactive voice response system, audio cassettes and CD ROMs etc which have been used in education for different purposes (Sharma, 2003; Sanyal, 2001; Bhattacharya and Sharma, 2007)..

Chemistry is generally referred to as the mother of all sciences Bello,(1990). Chemistry occupies a unique position in the school curriculum. Chemistry is central to many sciences related to courses such as Medicine, Pharmacy, Agriculture, Nursing and Biochemistry so on. It is obvious that no student intending to study these disciplines can do without chemistry. Among higher secondary students, the difficulty recognized in learning chemistry is of the organic chemistry area and suffer severely to understand the concepts about the chemical bonds when taught by traditional method. Generally, the students’ achievement in chemistry is very low; it may due to lack of using proper instructional strategies.

The use of ICT in education lends itself to more student-centered learning settings. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the 21st century. ICT helps in providing a catalyst for rethinking teaching practice (Flecknoe, 2002; McCormick & Scrimshaw, 2001)

ICT AND INSTRUCTION IN EDUCATION

There are two major areas of application of ICT in the teaching and learning processes in secondary schools. They are the Computer Assisted Instruction (CAI) and Computer Managed Instruction (CMI). Beside these, the use of internet, electronic mail, tele-conferencing, website hosting, topic searching and file transfer have provided access to information that covers a wide range of topics and interests in medicine, research, science and technology.

CHEMISTRY CONCEPTS: ICT MAKES EASE

It is often perceived difficult and abstract concepts in chemistry such as radio-activity, mole and stoichiometry, electrochemistry, organic chemistry, etc. can be encoded or programmed and

presented in an exciting and captivating inter-phase that is simply a beauty to behold. The benefits of instruction presented this way are numerous. These include.

- making learning exciting and challenging
- allowing for quick responses and feedback
- allowing learners proceed at their own pace
- increasing moderation;
- enabling student to gain both qualitative and quantitative understanding of problems of the topics under study and
- stimulating experiments.

The employment of these additional media can serve to supplement or/and complement the actual classroom and laboratory chemistry activities and information from books. The overall benefit is that learning of chemistry concepts will be enhanced; retention and transfer of knowledge can be assured. It must be noted that many students perform poorly not because they are benefit of knowledge but because of inability to retain and transfer such knowledge in solving problems in more noble situations. Mole concept finds application in several areas of quantitative chemistry like electrolysis; mass-volume relationship etc. to have both qualitative and quantitative understanding of such topics will aid transfer of learning.

PROGRAMMING OPTIONS

There are two major options for device in ICT-based chemistry instruction. One is ready made off-the shelf packages and the other is the customized self-developed applications. The former means commercially available educational soft-ware which have been prepared with all possible user queries in mind. There are many such packages in compact discs around. The major limitation here is lack of flexibility as all possible queries have been envisaged and answers supplied. They do not give room for new questions and responses as they may arise from time to time.

The other option is to develop the software in line with the prevailing and immediate environment that make possible students' queries as obtained in day today classroom interaction.

These could be developed in line with local classroom and home environments. The major problem here is a lack of competence. Software development, a major field of computer science, requires a versed knowledge of programming languages like C++, Java, Visual basics, etc. This knowledge is necessary to encode the desired topics properly into machine-readable forms. The development of tasks, exercises, games, drills, etc demands a good grasp of programming languages and techniques that are not cheap to come by.

In addition to electronic-learning, a web-based system with colourful hyperlinks linking related topics to one another in a quick-reference manner, can be developed. This makes studying faster and wider in scope. By this, a learner studying in a particular software environment can quickly navigate other related reference materials either in libraries or private books collection. These have proved an advantage in educational researches.

USE OF ICT IN TEACHING CHEMISTRY

Teaching at School as well as higher education levels, mostly, concentrates on giving information which is not the sole objective of teaching. Along with giving information, global Learning Objectives are

- Using ICT to promote and conduct laboratory investigations on a variety of topics appropriate for introductory-level chemistry.
- Using ICT to collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as data-collecting sensors (probes).
- Using ICT to identify and explain the process of naming and writing ionic compounds Containing main group or transition metals, covalent compounds, acids, and bases, using IUPAC nomenclature rules.
- Modifying classroom modules for demonstration purposes.

CONCLUSION

ICT has an impact not only on what students should learn, but it also plays a major role on how the students should learn. Along with a shift of curricula from “content-centered” to “competence-based”, the mode of curricula delivery has now shifted from “teacher centered” forms of delivery to “student-centered” forms of delivery. ICT provides- motivation to learn chemistry. So advanced ICT usage must be know about the teacher educators. Teacher educators must know how to teach easily their subjects by the use of innovative ICT practices. Based on this teacher educator should be frame the syllabus. More practical work should be given to teacher educator than theoretical work. India has a billion-plus population and a high proportion of the young and hence it has a large formal education system. The demand for education in developing countries like India has skyrocketed as education is still regarded as an important bridge of social, economic and political mobility (Amutabi & Oketch, 2003).

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The Learning Environment, Research and accessible opportunities

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The learning environment is respond to a diversity of learners' needs and their abilities. Like those environments contain multiplicity in students' backgrounds, learning styles, personal assets, enthusiasm and abilities that could endorse the involvement of students in meaningful learning activities. It also supports the effective use of range of resources, including technology and the media allows for active, interactive and collaborative learning. Among these activities, the classroom environment is the most significant to personal and social skill building to the students. Teachers should concentrate on establishing an atmosphere which tempts student interaction is respectful of the feelings ideas and opinions of others and can be described as caring, collaborative, encouraging and supportive.

Role of the teacher

Role of the teacher is the main character which can take the student's skills out by providing the setup and organization of the physical space to individual and small group work, engage in some activities anonymously, display ongoing projects and finished work, accommodate learning centres and encourage creativity. The teacher plays a critical role in structuring and managing an effective and efficient learning environment to the students. The primary role of the teacher is to guide and show them a way and facilitate learning and to aid students with the acquisition of the skills and abilities required to demonstrate huge outcomes.

Role of the Student

The student plays a critical role in contributing to an effective and efficient learning environment and to the achievement of learning outcomes. The primary task of the student is to take responsibility for learning and to demonstrate achievement of curriculum outcomes. Students can struggle to acquire skills and abilities that enable them to take responsibility for and make reasoned decisions. The students take responsibility for directing their own learning, completing tasks and monitoring progress and evaluate their progress and develop new strategies and plans for continuous learning and improvement

Research

At present, there are various sources available through which students can access information such as school resource centres, internet or world wide web, professionals, media (newspapers, television, magazines, etc.), friends, family and community members, including groups and organizations. Methods of gathering information can include in-depth reviews of personal development issues identified by students; class, school, community interviews carried out by students on specific issues or a range of issues; Regular personal reflection and creation of plans, periodically reviewed, promote continuous personal development and learning. Also students have the liability to find out their own interest. Like, in terms of research they themselves should bring out the idea where they want to shine. In this, accumulating information as well as awareness is significant. In this learning, we are going discuss about the couple of institutes and their ongoing research.

Research opportunities in Ahemadabath ,India

Institute for Plasma Research (IPR)

IPR is an autonomous research & development under the authority of Department of Atomic Energy (DAE). It largely concerned with the theoretical and experimental studies of Plasma physics. There are so many researches obtainable on in both Experimental and Theory divisions. Experimental division, which covers the fundamental properties of plasma whereas the basic theory division is dedicated in theoretical and computational studies of all branches of plasma.

There are enormous devices available to bring out the sciences out. One is the linear devices namely Large volume plasma devices (LVPD) which studies the different aspects of plasma confinement. There is an accelerator division which has a plan to develop a linear accelerator LINAC. The microwave division works in the regime of characteristic plasma frequencies and their effects on

plasma. Multi-cusp device in basic plasma experimental group is concerned with development of quiescent plasma device. Other fields are like Laser plasma group, non-neutral plasma group, the RF-Plasma group (helicon) are also accessible. The basic plasma experimental group is concerned with the study of waves and instabilities in plasma to solve the problems occurring in fusion devices. Dusty plasma devices are there in IPR. In the field of RF-technologies there are system like Ion cyclotron Resonance heating (ICRH), Electron cyclotron Resonance heating (ECRH) and Low hybrid current drive group (LHCD) are using for current research.

As for the need of the world for energy, the fusion experiments are being done all over the world, IPR has two Tokamaks namely, Aditya and SST-1 (Steady State Superconducting Tokamak). IPR is also collaborating in International fusion project ITER (International Thermonuclear Experimental Reactor). In the view of Industrial aspects of plasma physics and technology, the part of this Institute developed for Industrial plasma studies is Facilitation Centre for Industrial Plasma Technologies (FCIPT) which has provided device like plasma torch, plasma sanitizer etc. A study on soft matter is also carried out in FCIPT.

Physical Research Laboratory (PRL)

PRL is a prestigious institute, which is cradle of space sciences in India. PRL carries out fundamental research in select areas of Physics, Space and Atmospheric Sciences, Astronomy, Astrophysics & Solar Physics, Planetary, Geosciences and Atomic molecular and Optical physics.

The research in Astronomy and Astrophysics division involves investigations in the optical, infrared, X-rays and radio wavelength bands to understand some of the outstanding problems related to galactic and extra galactic cosmic phenomena, such as star formation, stellar evolution, interstellar medium, active galactic nuclei. In the planetary division, the research involves the stable and radioactive isotopes to characterize and determines time scales of processes occurring in early solar system.

The planetary science group, which is involving to study out the origin and evolution of solar system with focus on inner planets. The PLANEX, planetary science and exploration programme people exclusively working for developing payloads for planetary missions in India. At present, they are imparting in the payload for the upcoming Indian mission Chandrayaan II.

I got an opportunity to work in the above said prestigious institutes to carry out my research through PLANEX program leads to Chandrayaan II. I could able to get this chances is only because of the encouragement which has been provided by our Physics division and faculties and also our college. I expect more and more students should come out and get into research to utilize all those existing resources.

Online Examination: Means for enhancing quality in higher education

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Introduction

It is well recognized now that the advancement in Information and Communication Technology (ICT) has greatly changed the teaching-learning process both at school and higher education levels. ICT has not only changed the instructional system but the examination and evaluation system is also being influenced to a great extent. In the recent years, several innovative initiatives have taken place in the field of examination and evaluation. Online assessment is now very common all over the world. Online examination makes the assessment and evaluation system learner centric as it can be conducted when the candidate is ready, rather than at the convenience of the system.

In view of the fact that the learners learn at different paces, there is no reason, other than administrative convenience, to test them at a certain fixed interval in all courses simultaneously. However, now the use of ICT in the field of education has reduced this barrier of administrative inconvenience in making the examination system more flexible and learner oriented. In general, every student should be given a choice of taking exam as per their preparation. Moreover, at higher education level, particularly in open and distance learning system, a large number of learners are working or employed. A large number of such distance students do not get through because they do not get more than a week off before the exams hardly sufficient time for preparation for all subjects. Allowing them, to appear in the examination as per their convenience and preparation would greatly enhance their performance. Allowing students to take more than two exams once-a-year would lead to a more learner-friendly system and would help in reducing the stress of the learners. In the long run, it becomes imperative that the system gradually moves towards ICT enabled online examination system.

Online Examination

A examination is a detailed investigation, the act of conducting the detailed investigation or is a formal test of our knowledge or skills in a given area. Exams check our subject expertise and skills. If an individual learning something, He/she can judge the result of his/her learning online through an exam. This is why exams are conducted. There are basically two methods of conducting an exam: offline and online.

Current examination process includes many activities including exam paper generation, distribution of exam paper to the respective centers in secure way, conducting the exam, collection of answer sheets and passing those answer sheets to examiner for checking, moderation of the answers, result declaration. Traditional examination process is time consuming and result declaration process gets delayed. Online Examination itself represent the examination through the internet.

Online examinations, sometimes referred as e- examinations, are the examinations conducted through the internet for the candidate. Most of the examinations issue results as the candidate finish the examination, when there is an answer processing module also included with the system. Candidate is given a limited time to answer the questions and after the time expiry the answer paper is disabled automatically and answers is sent to the examiner. The examiner will evaluate answers, either through automated process or manually and the results will be sent to the candidate through mail or made available in the website. Today many organizations are conducting online examinations worldwide successfully.

When applicant/student is going to appear for the exam from remote location identity of the applicant is captured automatically by the web camera installed on the system. Images of the applicant are captured in random mode throughout the process of exam time. Such randomly captured images are compared with standard identity image of the applications.

Examination is one of the critical evaluation mechanism in the education world. With latest trend is to use technology for student evaluation, importance of online assessment is growing. Many entrance examinations like CAT (Common Admission Test) 2012, GATE (Graduate Aptitude Test in Engineering) 2013 would be conducted online and in future there is likelihood that most of the examinations of school, higher education, entrance tests would be conducted with the help of technology.

Advantages of online examination

The major advantage is that it can be conducted for remote candidates and evaluation of answers can be fully automated for multiple choice questions and other essay type questions can be evaluated manually or through automated system, depending on the nature of the questions and the requirements. Also online examination can be conducted at any time and does not higher cost as traditional exam scenario as there is no paper work involved. e.g printing exam papers, prepare paper admissions etc. there is no invigilators, also no need of arrangements of exam centers. When comparing with traditional exam scenario the cost for online examination will be almost zero after the online exam system is establishment and if maintenance cost is not considered.

Recommendations

All the colleges should be encouraged to give the internet facility to the students without any hindrances. All the internal and external examination should be conducted in online. User name or password should set with high security. Feedback release date to be set for online examination. There should be a time alert in the examination. It have to alert every ten to fifteen minutes to save the answer. Use 2GB of RAM or more for online examination.

Conclusion

Thus it can be said that with the use of ICT, the examination and evaluation system both at school and higher education level can be revamped to overcome the shortcomings of the traditional system of examination. It not only makes the evaluation system more transparent and student centric, but it also provides an ample opportunity for the students to appear in the examination as per their convenience and choice of date, time and place of examination. Many examining bodies are already using the ICT for both academic and administrative purposes in the field of examination and evaluation. But it needed to intensify this effort in a collaborative manner.

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Adventure Of Modern Teaching Strategies In Science

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Introduction

“Science is organized knowledge
Wisdom is organized life”

Immanuel Kant

Science is a process as well as knowledge. Science is bigger than human-centered subjects like history, literature, language, music, art. Science is a moving target, forever advancing and getting more complicated. It's hard to keep up and really hard to catch up. What you learn in high school is often so different by the time you have kids of your own that you can't easily help them with their science homework. Science is like a foreign language but is not taught that way. Science is an extreme sport for the brain, and needs to be practiced like that. If we take some time off from science, which most people do, it's hard work to get back in shape. Meanwhile, the vocabulary has changed.

Science Education

Science education is the field concerned with sharing science content and process with individuals not traditionally considered part of the scientific community. The learners may be children, college students, or adults within the general public.

Importance of science education

1. A basic human motivator is to try to understand . Why did something happen. How does something work. Curiosity about the world around us, about what makes it and us TICK is at the foundation of invention, of creativity. Teaching science well can nurture that curiosity, can satisfy some of that yearning to understand. Understanding why a year is what it is for us on planet Earth feels good.

2. A Knowledge and love of science is the ultimate equalizer, the pathway to human rights and a better quality of life. Countries with strongly supported science progress are better quality of life countries with strongly supported science programs are better off economically have great number of people creating new technologies.

3. Our knowledge of how and why things are the way they are in the natural world is our greatest natural resource, second only to water. the way we acquire that knowledge and understanding, called the scientific method, is not difficult, nor does not require memorizing a list of words.

Modern teaching strategies

Indoor Labs – Indoor labs are a staple of education. This teaching strategy encourages cooperation in small groups and participation in doing science. This resource gives tips for making individuals accountable during group work, making handouts, and structuring lab time.

Campus Based Learning – Campus-based projects can provide hands-on, real-world projects that can be accomplished without a field trip budget or transportation by using buildings and grounds as teaching tools.

Group Work Methods

Group work is a way of getting students to work together to solve a problem or learn new information. By using group work, educators teach students how to learn from one another's ideas. Since scientists do not work in isolation, using group work in a structured way can teach students skills in collaboration and accountability, similar to skills scientists must have. **Game Based Learning**

In game based learning, students compete to learn material. Included in this resource are tips for making a meaningful game, making rules fair, and grading.

Socratic Questioning

Educators present thoughtful questions for students to discuss which cause them to think critically about a topic or issue. The educator then requires students to justify their responses. **Experience based Environmental projects**

Experience-based environmental projects offer a way for students to apply classroom topics like energy use, global warming, water quality and land use to their own lives, and to realize that although these issues may be global or regional, they ultimately have roots at the individual level.

Civic Engagement and Service Learning

Connecting students with community members to conduct science in areas similar to what you are teaching in the classroom can be a very powerful lesson to students that what they are learning is relevant and useful to their future careers and lives as informed citizens

Interactive Lecture Demonstrations

This resource provides formatting for scaffolding learning from demonstrations. Students predict an outcome, observe the demonstration and reflect on their previous assumptions of the outcome.

Lecture Tutorials

This resource offers suggestions and rationale for creating worksheets for students to complete as they listen to lecture presentations. These worksheets make lectures more interactive and help students understand what information is most important from lectures.

Gallery Walks

In a Gallery Walk, questions are posted at stations around the room. Teams of students rotate around the classroom, composing answers to questions while reflecting upon the answers given by other group

Effective strategies for teaching science vocabulary Time to talk

It is important to promote students' dialogue as they have instructional conversations. We need to provide students with opportunities to use their colloquial language and translate back and forth with scientific and technical terms. We can use this strategy, called *interlanguage*, to discuss the different explanations of the students' experiences in the classroom.

Reading Science Text Cards

Text cards help students interact with words and their meanings. Teachers can create science text cards by writing statements about science concepts on index cards. Working individually or in small groups, students discuss the statements before sorting. A number of different formats can be used:

True/false cards.

These cards include statements drawn from the text. Students sort the cards into true and false piles. For example, when teaching a unit on plants, use statements such as: "Plants use light from the sun in the process of photosynthesis" (true), and "Plants must depend on animals for food" (false).

Agree/disagree cards.

This format works well for more value-laden or controversial topics. One statement (including appropriate vocabulary) is written on each card. Students sort the cards into three categories: "agree," "disagree," or "not sure."

Word Games

Traditional games can be adapted to help students experience the language of science. For advanced students, making their own games using science vocabulary promotes in-depth understanding of words and their meanings.

- Odd One Out
- Scrabble
- Trivial Pursuit
- Pictionary
- Dingbats
- Twenty questions, Who am I?
- Breaking words down into smaller words. For example:
 - invertebrate — in, brat, tea, tear, rate, vertebrae...
 - photosynthesis — sit, sin, thesis, photos...

Conclusion

Science is about a whole lot more than that and to sum it up we believe that science is a way of helping the brain grow in finding new knowledge and help us defeat our curiosity of how the world develops and work today .Science is important because it has helped from the world that we live in today. Teachers must know about different method while teaching science. Modern teaching enhance student Knowledge.

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Electronic Library and Digital India vision

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INTRODUCTION:

An electronic library is a heterogeneous system in which information is available in hard copy, on magnetic tape and discs, CD-ROMs and video discs, and also from online sources. Storage and copying of information are done either by downloading or by printing from a master file. Such libraries can provide very diverse information; however, electronic libraries will evolve in an incremental fashion and, at least for the next few decades, we will operate in a dual paper-based and electronic environment. Digital library collections contain fixed permanent documents. While current libraries have more dynamic collections, a digital library facilitates quicker handling of information. Digital libraries break the physical boundaries of data. Digital libraries are as important for communications and collaboration as for information seeking activities.

DIGITAL LIBRARY OF INDIA :

DLI is a digital collection of freely accessible rare books collected from various libraries in India. DLI project started in early 2000 with the vision to archive all the significant literary, artistic and scientific works of mankind and to preserve digitally and make them available freely for every one over Internet for education, study, appreciation and for future generations. As a first step in realizing this vision, it is proposed to create the Digital Library with a free-to-read, searchable collection of one million books, predominantly in Indian languages. The Project was initiated by the Office of the Principal Scientific Advisor to the Government of India and subsequently taken over by the Department of Electronics and Information Technology (DeitY), Ministry of Communications and Information Technology (MCIT), Govt. of India. The idea was also to create a test bed for researchers to improve scanning techniques, optical character recognition, intelligent indexing and in general to promote Indian Language Technology Research.

Digital India is a campaign launched by the Government of India to ensure that Government services are made available to citizens electronically by improving online infrastructure and by increasing Internet connectivity or by making the country digitally empowered in the field of technology. It was launched on 2 July 2015 by Prime Minister Narendra Modi. The initiative includes plans to connect rural areas with high-speed internet networks. Digital India consists of three core components.

HISTORY:

Early projects centered on the creation of an electronic card catalogue known as Online Public Access Catalog (OPAC). By the 1980s, the success of these endeavors resulted in OPAC replacing the traditional card catalog in many academic, public and special libraries. This permitted libraries to undertake additional rewarding co-operative efforts to support resource sharing and expand access to library materials beyond an individual library. An early example of a digital library is the Education Resources Information Center (ERIC) which was "born digital" in 1966.

SOFTWARE

There are a number of software packages for use in general digital libraries, for notable ones see Digital library software. Institutional repository software, which focuses primarily on ingest, preservation and access of locally produced documents, particularly locally produced academic outputs, can be found in Institutional repository software. This software may be proprietary, as is the case with the Library of Congress which uses Digiboard and CTS to manage digital content.

DIGITIZATION

In the past few years, procedures for digitizing books at high speed and comparatively low cost have improved considerably with the result that it is now possible to digitize millions of books

per year. Google book-scanning project is also working with libraries to offer digitize books pushing forward on the digitize book realm.

ADVANTAGE:

The advantages of digital libraries as a means of easily and rapidly accessing books, archives and images of various types are now widely recognized by commercial interests and public bodies alike. Traditional libraries are limited by storage space; digital libraries have the potential to store much more information, simply because digital information requires very little physical space to contain it. As such, the cost of maintaining a digital library can be much lower than that of a traditional library. A physical library must spend large sums of money paying for staff, book maintenance, rent, and additional books. Digital libraries may reduce or, in some instances, do away with these fees. Both types of library require cataloging input to allow users to locate and retrieve material. Digital libraries may be more willing to adopt innovations in technology providing users with improvements in electronic and audio book technology as well as presenting new forms of communication such as wikis and blogs; conventional libraries may consider that providing online access to their OP AC catalog is sufficient. An important advantage to digital conversion is increased accessibility to users. They also increase availability to individuals who may not be traditional patrons of a library, due to geographic location or organizational affiliation.

- No physical boundary. The user of a digital library need not to go to the library physically; people from all over the world can gain access to the same information, as long as an Internet connection is available.
- Round the clock availability A major advantage of digital libraries is that people can gain access 24/7 to the information.
- Multiple access. The same resources can be used simultaneously by a number of institutions and patrons. This may not be the case for copyrighted material: a library may have a license for "lending out" only one copy at a time; this is achieved with a system of digital rights management where a resource can become inaccessible after expiration of the lending period or after the lender chooses to make it inaccessible (equivalent to returning the resource).
- Information retrieval. The user is able to use any search term (word, phrase, title, name, subject) to search the entire collection. Digital libraries can provide very user-friendly interfaces, giving click able access to its resources.
- Preservation and conservation. Digitization is not a long-term preservation solution for physical collections, but does succeed in providing access copies for materials that would otherwise fall to degradation from repeated use. Digitized collections and born-digital objects pose many preservation and conservation concerns that analog materials do not. Please see the following "Problems" section of this page for examples.
- Space. Whereas traditional libraries are limited by storage space, digital libraries have the potential to store much more information, simply because digital information requires very little physical space to contain them and media storage technologies are more affordable than ever before.
- Added value. Certain characteristics of objects, primarily the quality of images, may be improved. Digitization can enhance legibility and remove visible flaws such as stains and discoloration.
- Easily accessible.

Digital Library of India, part of the online services of the Indian Institute of Science, Bangalore and partner in the Million Book Project, provides free access to many books in English and Indian languages. The scanning of Indian language books has created an opportunity for developing Indian language optical character recognition (OCR) software. The publications are mainly in PDF or QuickTime format. Because of copyright laws, the texts are all out of copyright and therefore not sources for current information, but rather useful for history and background.

DIGILOCKER

Digital Locker facility will help citizens to digitally store their important documents like PAN card, passport, mark sheets and degree certificates. Digital Locker will provide secure access to Government issued documents. It uses authenticity services provided by Aadhaar. It is aimed at eliminating the use of physical documents and enables sharing of verified electronic documents across government agencies. Three key stakeholders of DigiLocker are Citizen, Issuer and requester.

Attendance.gov.in

Attendance.gov.in is a website, launched by PM Narendra Modi on 1 July 2015 to keep a record of the attendance of Government employees on a real-time basis. This initiative started with implementation of a common Biometric Attendance System (BAS) in the central government offices located in Delhi.

SBM Mobile app

Swachh Bharat Mission (SBM) Mobile app is being used by people and Government organisations for achieving the goals of *Swachh Bharat* Mission.

e - Sign framework

e - Sign framework allows citizens to digitally sign a document online using Aadhaar authentication.

e - Hospital

The e Hospital application provides important services such as online registration, payment of fees and appointment, online diagnostic reports, enquiring availability of blood online etc.

National Scholarships Portal

National Scholarship Portal is a one stop solution for end to end scholarship process right from submission of student application, verification, sanction and disbursal to end beneficiary for all the scholarships provided by the Government of India.

DIGITAL INDIA WEEK

At the launch ceremony of Digital India Week by Prime Minister Narendra Modi in Delhi on 1 July 2015, top CEOs from India and abroad committed to invest ₹224.5 lakh crore (US\$3.3 trillion) towards this initiative. The CEOs said the investments would be utilized towards making smartphones and internet devices at an affordable price in India which would help generate jobs in India as well as reduce the cost of importing them from abroad.

SILICON VALLEY SUPPORT FOR DIGITAL INDIA

Leaders from Silicon Valley, San Jose, California expressed their support for Digital India during PM Narendra Modi's visit in September 2015. Facebook's CEO, Mark Zuckerberg, changed his profile picture in support of Digital India and started a chain on Facebook and promised to work on WiFi Hotspots in rural area of India. Google committed to provide broadband connectivity on 500 railway stations in India. Microsoft agreed to provide broadband connectivity to five hundred thousand villages in India and make India its cloud hub through Indian data centres. Qualcomm announced an investment of US\$150 million in Indian startups. Oracle plans to invest in 20 states and will work on payments and Smart city initiatives. However back home in India, cyber experts expressed their concern over internet.org and viewed the Prime Minister's bonhomie with Zuckerberg as the government's indirect approval of the controversial initiative. *The Statesman* reported, "Prime Minister Narendra Modi's chemistry with Facebook CEO Mark Zuckerberg at the social media giant's headquarters in California may have been greeted enthusiastically in Silicon Valley but back home several social media enthusiasts and cyber activists are disappointed." Later the Prime Minister office clarified that net neutrality will be maintained at all costs and vetoed the Basic Internet plans.

CONCLUSION:

Education is an important force in the advancement of civilization. Its success depends upon the sharing of information. Electronic libraries can provide a vehicle for extending collaboration, which is at the heart of the academy, with the aim of more effective education.

A digital library is a special library with a focused collection of digital objects that can include text, visual material, audio material, video material, stored as media formats (as opposed to print, microform, or other media), along with means for organizing, storing, and retrieving the files and media contained in the library collection. Digital libraries can vary immensely in size and scope, and can be maintained by individuals, organizations, or affiliated with established physical library buildings or institutions, or with academic institutions. The digital content may be stored locally, or accessed remotely via computer networks. An electronic library is a type of information retrieval system.

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Modern Perspectives And Strategies In Teaching, Learning And Evaluation.

(Use of Multimedia and Animation in Learning)

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I. Introduction

Since the educators first began to use computers in the classroom, researchers have tried to evaluate whether the use of educational technology has significant and reliable impact on student achievement. Searching for an answer, researchers have realized that technology cannot be treated as a single independent variable, and that student achievement is gauged not only by how well students perform on standardized tests but also by students' ability to use higher-order thinking critically, analysing, making inferences, and solving problems. Judging the impact of any particular technology requires an understanding of how it is used in the classroom and what learning goals are held by the educators involved, knowledge about the type of assessments that are used to evaluate improvements in student achievement, and an awareness of the complex nature of change in the school environment. Whether technology should be used is no longer the issue in education. Instead, the current emphasis is ensuring that technology is used effectively to create new opportunities for learning and to promote student achievement. Educational Technology is not, and never will be, transformative on its own, however. It requires the assistance of educators, who integrate technology into the curriculum, align it with student learning goals, and use it for engaged learning projects. The role of class room teacher is crucial factor in the full development and use of technology in the schools. When the educators use the accumulating knowledge regarding the circumstances under which technology supports the broad definition of student achievement, they will be able to make informed choices about what technologies will best meet the particular needs of specific institution. In the current scenario of educational institutions, multimedia has dug up its own kind of space in some or the other way as a tool of educational technology. Multimedia has overcome the barriers of time and space and provides evidence to be accepted as an anytime and anywhere tool for educating multi-disciplinary masses. The process of knowledge acquisition through a multimedia simulation. Multimedia technology empowers the educational process by means of increased interaction between teachers and students. Apart from the fact that multimedia can provide educators and students with endless possibilities of quality teaching and learning, taking vital consideration of the pedagogical strengths and limitations of multimedia, it can be used to its fullest potency, and reach the eminence of "New Educational Technological perspective".

II. MULTIMEDIA AND EDUCATION

A. Multimedia

Multimedia refers to the integration of two or more different information media within a computer system. These media can include text, images, audio, video and animation. It is a combination of digitally manipulated text, photographs, graphic art, sound, animation, and video elements. With multimedia, the communication of the information can be done in a more effective manner and it can be an effective instructional medium for delivering information. A multi-Sensory experience can be created for the audience, which in turn, elicits positive attitudes towards learning. The power of multimedia lies in the fact that it is multi-sensory, stimulating the many senses and also interactive enabling the end users to control the content and flow of information. This has introduced important changes in our educational system. The evolution of multimedia has made it very possible for learners to become involved in their work. This would make them active participants in their own learning process.

B. Educational Technology

Educational Technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological process and using and managing appropriate technological processes and resources. It is most simply and contentedly

defined as an assortment of tools that might prove helpful in student centered learning ,problem based learning. It advocates the teacher becoming the “ Guide on the side”. Educational Technology also called “Learning Technology”, mainly comprises of the use of technology in the process of teaching and learning. Here the technology does not only include the use of latest tools and techniques like laptops, interactive white boards, and smart phones internet, Wi-Fi, and YouTube etc., although they are massively preferred by the ,today’s learners for their learning potential but also encompasses efficient and enhanced learning management systems, schema of information dissemination ,effective teaching and management of student masses, feedback mechanisms and performance evaluation methodologies etc.,

C. Multimedia Learning Environment

Multimedia provides a technology based constructivist learning environment where students are able to solve a problem by means of self explorations, collaboration and active participation. Simulations, models and media rich study materials like still and animated graphics, video and audio integrated in a structured manner facilitate the learning of new knowledge much more effectively. The interactive nature of multimedia provides the room to enhance traditional “chalk and talk” method of teaching with more flexibility to learners to adapt to individual learning strategy. It enable both the educators and learners to work together in an informal setting. The role of educators and learners are extended. Furthermore,

it encourages and enhances peer learning as well as individual creativity and innovation.

III. Multimedia Authoring Tools

Any software or collection of software components that authors can use to create or modify multimedia content for use by other people, is a multimedia authoring tools. In the development of educational software, an authoring system is a program that allows a nonprogrammer to easily create software with programming features. The programming features are built-in but hidden behind buttons and other tools , so the author does not need to know how to program .Generally authoring system provides lot of graphics ,interaction, and other tools educational software needs.

Depending on the educational multimedia application which is to be developed, what information is to be conveyed, who the audience will be, and how much interaction there will be between the application and the user , an appropriate tool can be chosen. Educational multimedia application can be subdivided into four typical educational multimedia application areas:

Text-based Applications

Interactive Applications

Web Applications

Mobile (smart) phones Applications.

Text-based Applications

Many multimedia applications provide efficient navigation through a large resource of primarily text-based information. These application need to be searchable so that relevant information can be found easily and quickly. Development tools, which cater to this type of application generally, provide hypertext capabilities. Hypertext is similar to regular text, except that it contains information pointing to another point in an application. Inter active Applications

The majority of educational multimedia fall into category of interactive, graphical applications. These applications are fully capable of multimedia tools which can handle all media formats, as well as providing interactivity with the users. It is also offer a very high level language or interpreted scripting environment for navigation control and for enabling user inputs. This is often desirable in an education setting as it provides the ability to allow specific feedback to user. Authoring tools, which caters to this type of application generally, included programming future, commands and functions provided in the scripting language. Web Applications Information is made accessible on the World Wide Web using a mark-up language called HTML(Hyper Text Markup Language).This language provides the common protocol forproviding rich- formatted text, embedded graphics, sounds, movies, and hypertext. Morerecently there has been the development of image map, and forms fill-out technology. Image mapping allows selected regions on an image to contain link which, when clicked, take the user to another document. The fill-out forms function allows user feedback through fields, buttons, and drop-menus. Mobile (smar t) phones Applications Gale research group define phone as

an electronic telecommunications device that can make and receive telephone calls. It connects to a wireless communications network through radio wave or satellite transmissions. Nowadays, in addition to telephony, mobile phones support a wide variety of other services such as text messaging, MMS, email, internet access, short range wireless communications (infrared, Bluetooth), multimedia applications, gaming and photography. Mobile phones that offer these and more general computing capabilities are called smart phones. Mobile Applications are the software that runs on a mobile device and performs certain tasks for the user of the mobile phone. Emantr as a company that develops online and mobile educational tools, has officially launched Mob121, a platform for creating, managing and distributing educational content to the web and mobile devices. Mob121 is an educational application created to facilitate mobile learning by complementing current learning methods. Available as a mobile app, desktop widget or web application, Mob121 provides users with access to customizable learning material, which can be accessed anywhere. Mob121 targets individual students and teachers, as well as institutions like colleges and universities. Each account allows users to create educational content like study guides, flash cards or quizzes, then manage the content to specific groups, and finally, publish it to mobile devices or social networks. Another example of a Mobile multimedia authoring tool is Wapple Canvas. It is a design and publishing platform, enabling the development of highly functional, creative and scalable educational mobile websites.

IV. Animation in Education

We are always looking for new and better ways to educate the young. First purpose of animation in academics is to fulfill a cognitive function. In this role, animations are intended to support students' cognitive processes that ultimately result in them understanding the matter. Secondly, as an affective learning tool that attracts attention, engages the learner, and sustains motivation.

Benefits of Animation as an effective learning tool

- Emphasizes development of students' skills and understanding of creating and responding.

- Enables students to apply imagination & rational Thinking.

- Enables students to invent and explore multiple solutions to a problem.

- Enables student to understand the value of reflection and critical judgments in creative work.

- Facilitates positive peer interaction, including receiving and using feedback.

- Encourages self-motivation to create and problem solve.

- Uses artistic literacy as a natural enhancement to learning in other content areas.

- Fosters positive attitudes towards Art & Animation.

- Introduces career possibilities.

V. Multimedia and its Pedagogical Strengths

Multimedia facilitates mastering basic skills of a student by means of drill and practice. It helps in problem solving by means of learning by doing, understanding abstract concepts, provide enhanced access for teachers and students in remote locations, facilitate individualized and cooperative learning, helps in management and administration of classroom activities and learning content, and stimulate real life problem handling environments, Multimedia Technology is used and experimented by various educational institutions of all levels all over the world in their own designed modes.

VI. Approaches to Multimedia in Education

- Universities Approach.

- Multi-disciplinary Approach.

- Universities Approach

There are two ways, multimedia education is imparted to the students by various universities/ institutions: A. Teaching methodologies of multimedia content creation, which include imparting hands-on skills of software packages used for creation and authoring of multimedia content and,

B. Employing interactive multimedia content and technology for effective teaching, which include the various methods of engaged learning like multimodal interactive information delivery; and personalized and enhanced anytime-anywhere access of the content. Multi-Disciplinary Approach

Various Multimedia educational programs have been designed, developed and implemented as a solution to observed problems in multiple disciplines. Various combinations of Multimedia and methodologies are being used as a try to solve the issues. The various organizations and institutions all over the world are dedicatedly working towards implementation of multimedia and exploring its multi-disciplinary units.

Conclusion

Multimedia has enormous potential to impart flexible, multi-modal, life-long education to heterogeneous mass learners. The Multi-disciplinary nature of multimedia makes it increasingly popular among people from diverse domains. Multimedia used in right direction has succeeded in psychomotor development and strengthening of visual processing of the intended users. In conjunction with the study of usefulness of multimedia in different educational scenarios, the important point for future research is that the time to come will surely promise the availability of multimedia technology to one and all, but its usage should be limited to and in consideration with its pedagogical strengths. The above studies clearly indicated that even if the networked classroom technology is made available to students, there were many other pedagogical issues because of which the students' interest and interaction in the classroom could not be increased. More research work is required in the area of multimedia pedagogy, so that the design, form and content of Multimedia is such that it does not hinder the usual educational process and supplements it with more info-entertainment.

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Escalation Of Newer Teaching Methods In Higher Education

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INTRODUCTION

Education is recognized as one of the critical elements of the national development of the 21st century. The activities of Department of Higher Education are focused towards developing India as a knowledge society. The Department's constant endeavor is to improve and expand education in all sectors, with a view to eliminate disparities in access and lay greater emphasis on the improvement in the quality and relevance of education at all levels. It focuses on policy formulation, programme implementation, coordination with other stakeholders, knowledge management, research and innovation, creation of intellectual property, training and capacity building. Improvement of access along with equity and excellence, the adoption of state specific strategies, enhancing the relevance of higher education through curriculum reforms, vocationalization, information technology, and quality of research, networking and distance education are some of the main policy initiatives of the higher education sector. The other important policy initiatives in higher education include programmes for general development of universities and colleges, special grants for the construction of hostels for women, scholarships to students, scheme to provide interest subsidy on educational loans for professional courses to ensure that nobody is denied professional education on account of pecuniary and making interventions to attract and retain talent in the teaching profession in the higher and technical education.

India's higher education system is the third largest in the world, next to the United States and China. The main governing body at the tertiary level is the University Grants Commission. Indian higher education system has expanded at a fast pace. As of 2011, India has 42 central universities, 275 state universities, 130 deemed universities, 90 private universities, 5 institutions established and functioning under the State Act, and 33 Institutes of National Importance. Other institutions include 33,000 colleges as Government Degree Colleges and Private Degree Colleges, including 1800 exclusive women's colleges, functioning under these universities and institutions as reported by the UGC in 2012. Distance learning and open education is also a feature of the Indian higher education system, and is looked after by the Distance Education Council. Indira Gandhi National Open University is the largest university in the world by number of students, having approximately 3.5 million students across the globe.

OBJECTIVES

1. To scrutinize the latest teaching methods adopted in higher education.
2. To understand a diverse predicament in implementation process.
3. To analyze the future prospects of newer teaching methods.

METHODOLOGY

The study is based on secondary data collection which includes:

1. Education Resources Information Centre.
2. *Information Centers* for Academic Recognition.

3. National Academic Recognition Information Center.
4. The *Bureau of Educational* and Cultural Affairs.
5. Government of India, Ministry of Human Resource Development.
6. Annual Report of Department of Higher Education 2011.
7. Various Websites connected with the relevant topics of Higher Education.
8. Journal papers, Articles and News Papers.

LIMITATIONS OF THE STUDY

1. The current study does not cover the entire scope of the newer education due to paucity of time and other constraints.
2. Secondary data are used.

REVIEW OF LITERATURE

For the past many years, not only in India, but also across the world, public expenditure on higher education has been declining at least in real prices as in relation to state incomes and budgets. The decline in public expenditure on higher education has emerged as a global crisis of higher education sectors and is the most noticeable trend. Compelled by economic reform policies or conceived of the rationale for reduced role of the state in funding higher education, most countries have inflicted serious cuts in public budgets for higher education. This trend exist in many countries, in some or all of the areas related to education: total public expenditure on higher education, per student public expenditure, public higher education expenditure's shares in relation to a particular country's national income or total government expenditure, and allocation in absolute and relative terms to the important programmes that include research, scholarships and so on. The decline is not confined to developing countries, though it is more prevalent in the developing than that in the developed countries. There has been a significant fall even in the advanced countries such as the United Kingdom, Australia and New Zealand. But the higher education sector generally suffered much in the high income countries. However, the decline was steep in some countries such as Botswana, Jamaica, Hungary and New Zealand (Tilak, 2006).

India needs to discover a framework that matches understudies' academic needs and their individual desires. India needs multi-dimensional and expansive based quality education to keep up its authority in the 21st century. In this manner, India ought to show the worry over the quality in education as the education in India is not aggressive regarding the amount and quality with different nations. (Kaur, Iqbal, 2014).

LATEST TEACHING METHODS IN HIGHER EDUCATION

Multimedia, is the combination of various digital media types such as text, images, audio and video, into an integrated multi-sensory interactive application or presentation to convey information to an audience. Traditional educational approaches have resulted in a mismatch between what is taught to the students and what the industry needs. As such, many institutions are moving towards problem based learning as a solution to producing graduates who are creative; think critically and analytically, to solve problems in innovative teaching and learning and to train them in this skill set. Let us analyze a few newer methods of teaching:

1. Flip Chart
2. Flannel Board
3. Overhead Projector

4. Linguaphone
5. Flash Card
6. Magnetic Board
7. Interviews
8. Flowcharts
9. Gaming and simulation (Gamification)
10. Fish Bone Technique
11. Field trips
12. Use of dramatization, skits, plays
13. Surveys
14. Research local archaeological site
15. Brainstorming
16. Murals and montages
17. Bulletin boards
18. Reading assignments in journals, monographs
19. Recitation
20. Assignments
21. Sand tables
22. Use of motion pictures, educational films, videotapes –
23. Word association activity
24. Case Studies
25. "Group dynamics" techniques
26. Free On-line Teaching
27. Decision Tree
28. Campaigns
29. Jigsaw Puzzle
30. Questioning
31. Debates (Formal)

PROBLEMS FACED BY NEWER EDUCATION

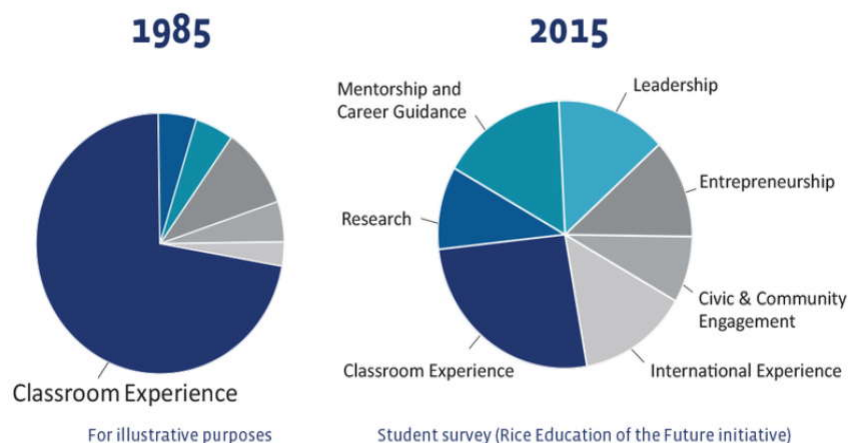
Our university system is, in many parts, in a state of disrepair...In almost half the districts in the country, higher education enrollments are abysmally low, almost two-third of our universities and 90 per cent of our colleges are rated as below average on quality parameters... I am concerned that in many states university appointments, including that of vice-chancellors, have been politicized and have become subject to caste and communal considerations, there are complaints of favoritism and corruption – **(Prime Minister Manmohan Singh in 2007).**

Other important factors identified by the World Bank 2008 include:

- The sluggish growth of public higher education financing.
- The squat proportion of science and engineering students.
- The lack of institutional autonomy to make decisions adapting to changing labour market conditions.
- Deprived working conditions /salaries leading to high levels of attrition among academic staff.
- Inadequate and inappropriate technology.
- A reluctance to adopt the ‘Third Mission’ – support for the economy.
- Regulatory authorities like UGC and AICTE have been trying to extirpate private universities that run courses with no affiliation or recognition.
- The fundamental weaknesses are lack of transparency and recommendations have been made to mandate high standards of data disclosures by institutions on performance.

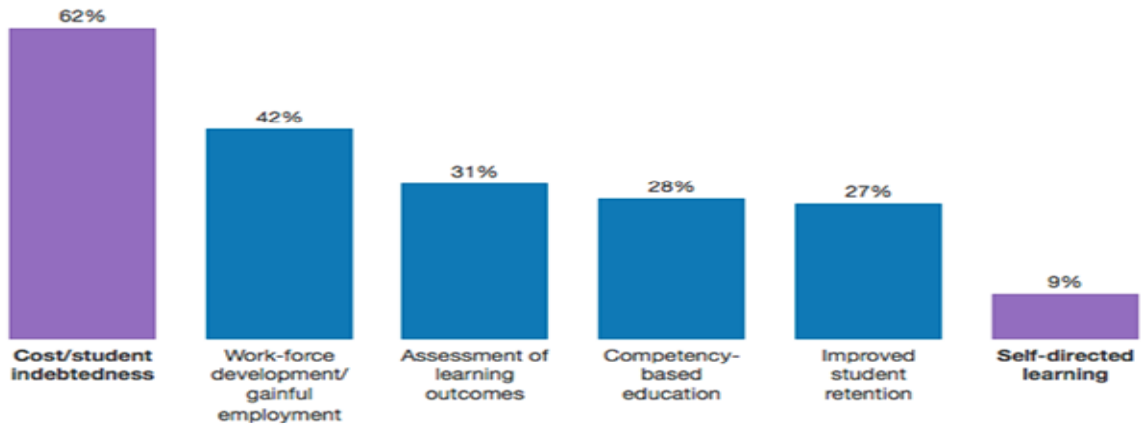
FUTURE PROSPECTS OF NEWER EDUCATION

Higher education cannot be developed to the exclusion of other policy initiatives. The development of infrastructure, better governance, public health improvements, trade reform, and financial market development – these and others will be needed as well. The benefits of higher education require a long gestation period. There may be shortcuts to establishing educational infrastructure, but shaping people to understand and convey higher education values and best practice will take decades, as opposed to a few years. Yet improvements can be seen from the charts presented below:



What Factors Will Have the Greatest Impact on the Future of Higher Education?

Issues ranked "most important" or "second most important":



Note: Despite respondents' focus on costs, only 2.4 percent of academic leaders at colleges offering MOOCs said their main goal was to "explore cost reductions."

CONCLUSION

It is more significant to move towards a bold and inspirational vision. There is a stratified three tiered structure that enables India as the largest higher education age bracket by 2030. The development of infrastructure, better governance, transition to a learner-centered paradigm of education, public health improvements, trade reform, financial market and prominent destination for R&D though benefits higher education -require a long gestation episode. The Task Force believes that amplification of higher education is a cogent and feasible line of attack to mitigate or avert further deterioration in their relative incomes, while positioning them on a higher and more sharply rising development trajectory.

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Higher Education In Rural India: Problems, Remedies And Initiatives

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INTRODUCTION

Education is one of the most powerful instrument for reducing poverty and inequality of society. Education is the key to enhance India's competitiveness in the global economy. Therefore ensuring access to quality education for all, in particular for the poor and rural population, is central to the economic and social development. The rapid expansion of higher education system has brought several pertinent issues related to the standards of its quality and equal availability of higher education facilities to all the categories of people of the society. India is a country with severe economic and social inequalities. There are some families with children rolling in wealth on one hand, while on the other, people strive of hunger. In India a large number of populations fall under middle class family and lower middle class families. At the same time lower economy class families also exist in large numbers. Now, when a large number of families and their youth are struggling hard to fulfill their basic needs, they naturally have to compromise with the higher education specially the youth of rural and remote areas. Normally it is observed in India, higher education institutions are mostly located in cities, main towns etc.; where it is not possible for all the youth to stay away from their families as they may be the only bread earner of their families. Apart from this, poor communication & transportation system of the rural areas also hinders equal access of higher education. The most important problem in the higher education system in India is the lack of quality of the institutions in rural areas. The quantitative expansion is not adequate. The inequalities among the institution located in rural area and urban area are quite remarkable. The institutions of higher education located in rural and socio-economic backward areas are lacking in the implementation of best practices in higher education and quality. There are number of colleges located in remote, rural, backward and hilly areas, striving to achieve excellence. In these colleges the student's enrolment is from the socio-economic backward families. Most of the students are the first generation learners of higher education. More than 70% of the students are scholarship holders as they are belonging to socio-economic backward families. There are no criteria for admission in the college, any students seeking higher education; who has passed the last qualifying examination, can enroll his name. The colleges are bound to enroll them, because they were established for these students. They were established with the objectives to provide education to these economically, socially and educationally weaker section of the society. In the assessment and accreditation by NAAC, such colleges get poor grades only because of the high dropout rates. The high dropout rate of the students in such colleges is a most important problem, which is to be solved.

Rural areas in India

Rural areas are also known as the 'countryside' or a 'village' in India. It has a very low population density. In rural areas, agriculture is the chief source of livelihood along with fishing, cottage industries, pottery etc.

The quest to discover the real rural India still continues in great earnest. Almost every economic agency today has a definition of rural India. Here are a few definitions:

According to the Planning Commission, a town with a maximum population of 15,000 is considered rural in nature. In these areas the panchayat makes all the decisions. There are five persons in the panchayat. The National Sample Survey Organisation (NSSO) defines 'rural' as follows:

- ✓ An area with a population density of up to 400 per square kilometer,
- ✓ Villages with clear surveyed boundaries but no municipal board,
- ✓ A minimum of 75% of male working population involved in agriculture and allied activities.

RBI defines rural areas as those areas with a population of less than 49,000 (tier -3 to tier-6 cities).

It is generally said that the rural areas house up to 70% of India's population. Rural India contributes a large chunk to India's GDP by way of agriculture, self-employment, services, construction etc. As per a strict measure used by the National Sample Survey in its 63rd round, called monthly per capita expenditure, rural expenditure accounts for 55% of total national monthly expenditure. The rural population currently accounts for one-third of the total Indian FMCG sales.

PROBLEMS

1. **Lesser Number of Institutes:** In comparison to the number of higher education institution present in urban areas i.e., cities or towns, there are very few institutions in rural areas of India. Technical higher educational institutions are very rarely established in the rural areas.
2. **Access:** The Gross Enrolment Rate (GER), measures, the access level by taking the ratio of persons in all age groups enrolled in various programs to total population in age group of 18 to 23. The access to higher education for all eligible in the country is a major issue before the policy makers.
3. **Equity:** On one hand GER stands low for the overall population, while on the other there are large variations among the various categories of population based on urban or rural habitation and rich and poor. Due to regional disparity in economic development and uneven distribution of institutions of higher education, the higher education is not equally available to the different sections of the society.
4. **Limitation of Quality:** The higher educational institutions suffer from large quality variation in so much so that a NASSCOM- Report-2005 has said that not more than 15per cent of graduates of general education and 25-30per cent of Technical Education are fit for employment. First, the quality norms of which are not comparable with international standards can't be maintained by the higher educational institute of rural areas. Secondly, the enforcement process is not stringent. Further political interference and corruption dilute the role and impact of these intuitions in ensuring the desired quality standards.
5. **Cost of Education:** One of the main factors of lower enrolment in rural area is the cost of education. Technical education sometimes only a dream for most of the students of rural areas where the people are mostly dependent on agriculture. Even sometimes it is seen that normal higher education expenses cannot be afforded by some of the families coming under lower middle class tag.
6. **Higher Teacher-student Ratio:** Student teacher ratio is one of the indicators used to describe the quality of education received in any education unit, be it in a city or in any rural areas of the country. UGC has recommended an ideal ratio of 1:30 for the general undergraduate courses. Unfortunately, because of lesser no of educational institutes in rural areas, more and more students are bound to enroll and the teacher-students ratio does vary to the standard so far as quality education is concerned.
7. **Privatization:** In India both public and private institutions operate simultaneously. In the year 2000-01, out of 13,072 higher education institutions, 42 per cent were privately owned and run catering to 37 per cent of students enrolled into higher education. Since providing grant-in-aid to private colleges is becoming difficult, they sometimes not able to maintain the minimum standard of quality education. The quality of education in these private colleges is very uneven. Many of the colleges because of shortage of funds are not able to hire well deserving and quality teachers which at times create a problem for the students to face. Apart from it some institutions do not have proper infrastructure like quality laboratory. But on the other side of the coin we actually could see there are some private colleges which have strived to enhance their standards and some of them rank better than many Government run colleges today which is not accessible for all.
8. **Misuse of Grants:** UGC provides financial assistance to the universities and colleges for various developmental activities. But the same fund is hardly seen to be properly utilized. Specially, in rural areas where the local bodies are not so strong, the guardian of the students are not so conscious about the proper use of financial assistance, administrative bodies takes the advantage of it.
9. **Lesser Research Activities:** It has been seen that not more than 20% of all students enrolled in a doctoral research programme complete their work and almost 80% drop out. A lack of motivation amongst university faculty to conduct and supervise research also stems from unavailability of good research students and a lack of professional incentive for research. However, to increase research output, the UGC began giving scholarships to students enrolled for a PhD in central universities, but ignores State universities.
10. **Poor input:** One of the major challenges facing by the higher educational institutes in rural areas is the standard of input; i.e. students, especially in general education. So far as higher education is concerned with quality education with quality output, the biggest challenge for these institutes where minimum cut off mark is not applicable at the time of admission.
11. **High dropout rate:** In rural areas of India the school dropout rate is more than normal. As a result of this very few students taste the sweetness of higher education. Even during college life also because of family burden, poor infrastructural facilities, lack of monetary support, apathy towards education etc. we can see high percentage of drop out among rural students.

12. **Lesser use of ICT:** ICT can affect the delivery of education and enable wider access to the same. In addition, it increases flexibility so that learners can access the education regardless of time and geographical barriers. It can influence the way students are taught and how they learn. But in most of the rural colleges and universities, use of ICT is hardly seen while teaching. There are lots of colleges in India where electricity problem is a common phenomenon. In those institutions we can expect only the traditional method of teaching.

13. **Inadequate physical infrastructure:** Quality education is possible when facilities, resources and technologies are upgraded. For this funding is needed which has been made on the basis of grades given by NAAC on the basis of various parameters. The higher educational institution of rural areas are bound to grade in the lower side since quality of input is also very low, higher ratio of teacher-students, poor communication etc. and due to this grants are also given on the lower side which hinders improvement in physical infrastructure.

14. **Faculty problem:** Quality of teaching depends upon quality of teachers. Availability of adequate and qualified faculty is a prerequisite of quality education. Quality teachers always prefer better colleges in the sense better input, standard teacher-student ratio, better communication, better physical facilities, better research facilities etc. and due to which the rural institutes has to suffer.

REMEDIES

1. **Equal importance in Rural Areas:** To assess the availability of various policies programs and facilities in higher education, there is an urgent need to access and find out from the students their awareness and utilization of facilities, as also to cross check the availability of the facilities in institutions where they are enrolled.
2. **Enhance Quality of Education:** All plans for expansion must have a major thrust on enhancing quality of education. Hence due care must be taken for developing skills of, teachers for enhancing teaching-learning transaction, creating conducive academic environment, improving the learning infrastructure, putting technology enabled learning into practice wherever possible.
3. **Establishment of research centers:** Establishment of research centers of excellence in various areas of local relevance must be pursued and these should be affiliated with the existing universities and institutions of national importance. UGC should focus more on research-based support to the universities and colleges. It should help in developing benchmarking in teaching and research, support curricula updation, develop norms for efficient governance, establish and support large number of interuniversity centre like institutions that will facilitate institutions of higher education towards quality and excellence in teaching and research. UGC should furthermore help in developing networking and electronic connectivity, besides helping institutions in optimally utilizing them.
4. **Checking drop-out ratio:** Higher education system should take interest in their feeder area or supply chain to improve quality and drop out as a priority need of the community and duty of higher education system and for their own growth i.e., higher education system.
5. **Establishing Career Counseling Cells:** Special career counseling cells must be set by the government so that students can also enroll themselves in other technical and professional courses apart from other general courses. Besides, the students can select subject according to their needs and capacity.
6. **Adequate fund:** To build a high quality education system, adequate funding must be made available by the Central and State governments to improve quality, at the same time, making higher education affordable to all specially for the families of rural areas where income level of the people is low and thus increasing access.
7. **Checking proper utilization of grants:** The grant provided by Central, State govt. as well as other bodies to the educational institutes is how effectively utilized is a matter of doubt. Administrative bodies of the uses the funds as per their own profitability rather than priority of the institute for greater social interests of the stakeholders. The regulatory bodies should ensure proper use of funds on the basis of priority.

How can rural development specialists help improve rural schools?

We have discussed that, in order to contribute to economic growth and to improve their own quality of life, people living in rural areas need at least a basic education. Rural development suffers when levels of primary school enrollment are low. Conversely, rural schools and their students suffer when rural development programs fail to take notice of their potential for developing human capital and for reducing poverty. People with a basic education need opportunities for jobs, credit, and/or land, if they are to put their new skills and knowledge to use. Thus, rural development and basic education are a two-way street. Those who work in education can benefit through collaboration with those who work in rural development, and vice versa. We conclude by offering recommendations for initial steps those rural education specialists at the World Bank and their clients can take with their colleagues in education to improve rural schools.

1. Help educators define what is “rural.” Bank documents reveal that those who plan education projects do not generally look at quantitative or qualitative data that would demarcate rural areas and that would reveal variations within rural areas that are important for supporting rural schools. Rural development specialists might help education specialists analyze the rural space, both the physical and social/cultural environment, so that either national or targeted rural education projects take the particular rural environment into account in project design and implementation. School mapping (determining where new schools should be built) is a particular exercise that would benefit from input of individuals that know the rural areas being mapped.
2. Collaborate in the preparation of World Bank required planning documents, including the Country Assistance Strategy and the Poverty Reduction Strategy Paper (PRSP). The PRSP, in particular, includes a focus on Community-Driven Development (CDD), which the process is shown to be effective in providing access to those public goods that are within the management capacity of community organizations. The CDD process encourages cross-sectoral activities and provides a procedural opportunity for Bank staff and their clients to consider improvements in primary schooling in plans for developing and sustaining the rural space.
3. Make available to schools people and other resources for teaching children about their rural environment, agricultural skills, and other practical skills and knowledge that complement the academic curriculum. Help schools connect children to their environment.
4. Partner on straightforward, well-defined interventions, such as mounting solar-power panels on schools or providing well water to schools. Satisfactory cooperation on visible projects might then point the way to other kinds of collaboration.
5. Encourage communities to use the school as a center for education and social activities beyond primary school. Make the school hospitable for adult literacy classes, extension activities, women’s groups, community functions, and other activities and events. This not only brings parents into the school, it also helps transform the school into a multi-function learning and meeting center and puts it at the center of the community. The CDD process lends itself to exploring community uses of school facilities.
6. Collaborate to train extension agents and primary school teachers to listen and respond to expressions of needs and problems outside of their own professional setting. Extension agents can learn to deal not only with agriculture and teachers not only with schools, but instead, both can deal with the broader rural space.
7. Promote political support. Effective schools, like other rural institutions, require broad-based support at the local level. Projects in all rural sectors, including education, often have components designed to increase support for their activities. Rural development and education specialists might pilot activities that foster local political support for a wide array of development activities, including school improvements as well as other rural development activities. Again, the CDD process provides opportunities for this kind of cross-cultural cooperation.

CONCLUSION

In sum, rural schools need more attention than they can get from the ministry of education. Genuine partnerships between education and rural development specialists can go a long way toward making rural schools effective. Our primary recommendation is that World Bank staff develops these partnerships in project planning and implementation as well as through continued sharing of information about their common needs and interests. If these initiatives are effectively implemented there will be a big improvement in the human resource development in the country that makes other countries to launch more developmental schemes in and outside the country.

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Professional development of faculty - An inclusive retention strategy to improve excellence in HEI's

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1.Introduction

India is recorded as one of the third largest higher education systems in the world with 33.3% million total enrolment and gross enrolment ratio of 23.6% in higher education (UGC,2013). This escalating of institutions produces thousands of graduate every year but they all are not found to be productive due to the decline in quality of higher educational institutions which is a great challenge existing recent years. The most demanding needs of today's management is to retain the most vital and dynamic resource of the institutions satisfied and motivated (Cutler,2001). Faculty are the capability of institution who can articulate the vision and passion of students and institution. An institution with a pool of talented faculty brings a reputation for the institution and with a good learning environment where the quality of education is expected. In the educational arena, the selection of an effective administration is crucial in maintaining a nurturing and supportive environment for teachers. Efforts to retain an employee should start the minute when the employee steps into the organization. Administrators should trust their teachers and involve in decision making. They articulate the vision that unifies the faculty. Administrators teach in classrooms to let the teachers know that they remain on their side. Retaining teachers is a goal for all college administrators.

2. Retention of teaching staff in Higher Education Institutions

Olsen.D(1993) points that high turnover is associated with low job satisfaction, poor productivity and high stress among employees. Adding to this, Barnhart(1995) views faculty who leaves voluntarily tends to have a high orientation towards achievement. The expertise teachers who are the fundamental resource of quality teaching in all institutions face a growing challenge of their recruitment and retention of strong teachers in higher educational institutions. The recruitment of good teachers is beyond the literatures (Darling-Hammond,2008). Institutional shift on framing excellent to extra-ordinary teachers who are unique and leave memorable educational experiences. The institutions should mould excellent teachers and retain experienced good teachers. This should be carried out from teacher's level, departmental and institutional level.

3. Professional development of teachers' – An Inclusive practice of retention in institutional strategy

The American Association of Higher education (AAHE) has defined “faculty development as the practice of facilitating improved faculty performance in a variety of domains including institutional, intellectual, personal, social and pedagogical” (Bokonjic.D.et al,2009). According to the definition, faculty development programme enhances personal improvement in career cycle by assisting them with grants writing, publishing, administration work along with teaching activities. Personal development through wellness management, interpersonal skills and a group of other programs to support the individual's well-being. Undergoing innovative research, publishing and presenting to the other academicians, professionals in education, scientists, scholars and industry people to implement the ideas in the society. Staff development is termed to be a continuous learning process which starts from first year of teaching till retirement. Its

interchanged as professional development and HR development. According to National Staff Development Council(NSDC), professional development is underneath the individual development since it bridges the gap between the abilities teachers possess and the areas of improvement. Professional development process includes three characteristics are enhancing knowledge, developing skills and improving understanding.

UNESCO defines "Teacher development is the professional growth a teacher achieves as a result of gaining increased experience and examining his or her teaching systematically". This includes the participation in workshops, seminars, short and long term courses, conferences, mentoring, publications, research related to their academic specialisation. This makes the teachers move towards the growth of professional career cycle which is organised by in-service training. Faculty enters the profession with a basic pre-conceived knowledge to reflect the students. Teaching and learning goes hand in hand as a continuous process. Teachers updated with latest concepts and theories to deliver knowledge to students. This can be achieved by professional development of teachers which is considered as a collaborative process which takes place with interactions between teachers, administrators and other members to get a diversified ideas through sharing of knowledge where the professional development has enormous models and there's no any right model to be implemented (UNESCO,2003). Teachers on going through the professional development process has a significant impact on their beliefs and practices both behaviorally and psychologically(UNESCO,2003 & Bokonjic.D.et al,2009) This in have a positive impact on student's learning. Professional development process transforms the teachers both individually and to the social behaviour builds self-confidence. This process is a major motivating force to accomplish the goals and objectives set by the institution. Their result when implemented in teaching improves student learning and performance and thus professional development in academia should be considered as a major element in the institutional strategy. An effective evaluation should be included to evaluate the FDP programmes effectiveness of teachers and it should be an on-going process. It enriches the teacher's subject knowledge in-depth with high quality towards their curriculum enhances student's thinking in the subject and create a competitive environment.

3.1. Teacher preparation programs -An endorsement for quality improvisation

The training programmes in the institution focus to improve the quality of teachers. Biswajeet Pattanayak(2005) in his book Human Resource Management identifies that proper training & development brings a sense of self worth, dignity and well-being of an individual making them valuable to the firm and society. The sense of achievement and satisfaction retain the employees considering their future development. Mentoring the newly joined teachers in a democratic and participative style with expert teachers and with other support to reduce teaching load and shared planning. It becomes a double profit system for the expert teachers where they are paid for their role along with teaching and learning with their wards. A teacher leaves the college when they are less prepared and less mentor support when they are at the institution in their first year. Teachers with less preparation , untrained, teachers handling subjects out of their specialization who are currently in teaching are another form of hidden demand. Handy (2008) has mentioned that proper innovation, and assimilation of new knowledge is essential for survival in any work environment. Institutions' should support teachers trained in traditional methods can handle new and different approaches for teaching.

The institution focus on every beginner after recruitment for their preparation into training programmes. Faculty Development programmes for a period in reputed institutions as a motivation strategy instead of appraising with monetary rewards improves their ability, self satisfaction and individual development. Twinning programmes by signing MoU with prestigious institutes around equipped with the best human resources create a global learning environment for the teachers.

The teachers are motivated and are set a deadline to complete National level eligibility tests. It should be made mandatory for all the teachers to attend a number of seminars, conferences and

publish articles in reputed journals in every academic year with ISSN/ ISBN number (Selvam.J, 2016). This is a path of quality teaching which is regarded to be the outcome or a property of every institution. Its institution's duty to bring out and motivate the teacher's passion towards learning in their field, for teaching and for their students. A teacher should be learning-centric for a quality teaching. A learning- centric approach is the best way to facilitate learning among students rather than content- centered approach which disseminates only knowledge. Institution's investment towards teacher training and equitable teacher distribution are the major drives handled by highly achieved countries which met with less shortages. (Darling-Hammond). Promotion should be based on effective teaching research, merit increment & tenure decisions. Quality improvisation underlies not only on the teacher it also includes the institution and learning environment. Learning communities which refer to all types of faculty who are engaged in intellectual interaction for the purpose of learning focus on a common goal being student-centric are supported and encouraged by the institutions and in turn the institution should be faculty-centric to retain them(Dr.Bernard.D.Sami,2016).Fair and clear academic process is necessary to give a complete knowledge to teachers and an open discussion of subject allocation is practiced among the teaching staffs. Interested faculty should be given priority in choosing the subjects based on their specialization and expertise and the staff who is handling the advanced course should have a clear idea who undertakes the primary course (Dr.Selvam.J, 2016).

4. Faculty development programme grants individual development

Faculty Development Programme is framed to create individual development plans for the faculty and assessment of staffs is executed based on staff development standards to ensure the high quality of teacher's skills acquired through experiences. These standards comprises the context of the new way of learning, content which refers to the skills and knowledge and at last the process which explains the learning of new skills. Implementation of the acquired skills through FDP will improve the weak areas of the institution's performance by filling the gap of training needs. The programme includes cross-sectional training to enrich the individual's current position to prepare them for new professional roles and responsibilities. Its obligatory for the university to focus in growth and development of teachers as well as the university. It can be achieved by setting up a systematic staff development office in each university where they plan and prepare the development programs according to the needs of faculty and areas of improvement in institution (Boonjic.D.et al,2009). Staff development has become a critical factor for universities where excellence of institution can be achieved by updating skills and if its not followed systematically it ends in aspiration and not accomplishment. Staff development as a individual development since its plan should be framed according to the individual's wishes and talents with encouragement and allocating with proper financial needs and motivating the staffs who hang back towards growth and development in their career. Talent management practices are majorly achieved through training and development with faculty empowerment. Self-efficacy where the teachers perceive their skills and abilities to be qualified to handle the students has a positive impact in students achievement. Faculty empowerment in decision making their professional growth opportunities, autonomy on their responsibility, work and status they gain from the institution are found to be the major influencing factors for retention of teachers in the institution apart from salary (Barthwal,2015).

5. Faculty empowerment as a retention strategy

Arabia et al(2013) in his article cites employee independence in workplace in decision making as a motivating factor towards performance. The author refers with Maslow's theory of motivation(1987) that people are not satisfied if they lack autonomy. Employee participation and empowerment & redesign, extensive training & performance contingent incentive compensation are widely believed to improve the performance of organizations. Tharayil.S.R.et al(2016) states that freedom in teaching, learning and framing the curriculum and evaluation by faculty should be encouraged by the institution. They should understand the concept of hybrid learning by

combining physical classroom with virtual classroom, theoretical learning with workshops, seminars through conventional methods of teaching. This can be executed only through the introduction of faculty empowerment programmes. FDP's conducted by the institutions should implement the results of those programmes from teachers doing it as a routine process. Moore (2005) identified integration of university plans, decision making structures and evaluation process and the integration of research, faculty experience and teaching components handled by the university improves the sustainability. There is always an urge in the faculty to search for the space to reflect their learned outcomes and transformation in teaching. Encourage creativity in new ways and provide mentoring and networking resources gives self-confidence and sense of belongingness towards the institution.

The role of e-learning, the advantages and disadvantages of its adoption in Higher Education.

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THE CONCEPT AND DEFINITION OF E-LEARNING

The Internet has become one of the vital ways to make available resources for research and learning for both teachers and students to share and acquire information (Richard and Haya 2009). Technology-based e-learning encompasses the use of the internet and other important technologies to produce materials for learning, teach learners, and also regulate courses in an organization (Fry, 2001). There has been extensive debate about a common definition of the term e-learning. Existing definitions according to Dublin (2003) tend to reveal the specialization and interest of the researchers. E-learning as a concept covers a range of applications, learning methods and processes (Rossi, 2009). It is therefore difficult to find a commonly accepted definition for the term e-learning, and according to Oblinger and Hawkins (2005) and Dublin (2003), there is even no common definition for the term. Holmes and Gardner (2006) also made a comment on these inconsistencies by saying that there may be as many definitions of the term e-learning as there are academic papers on the subject Dublin (2003) in trying to find a common meaning of the term e-learning went on to ask the following questions: Is e-learning an on-line coursework for students at a distance? Does it mean using a virtual learning environment to support the provision of campus based education? Does it refer to an on-line tool to enrich, extend and enhance collaboration? OR is it a totally on-line learning or part of blended learning? (Dublin, 2005). Some of the definitions of the term e-learning as given by different researchers and institutions are reviewed below. In some definitions e-Learning encompasses more than just the offering of wholly on-line courses. For instance Oblinger and Hawkins (2005) noted that e-Learning has transformed from a fully-online course to using technology to deliver part or all of a course independent of permanent time and place. Also the European Commission (2001) describes, e-Learning as the use of new multimedia technologies and the Internet to increase learning quality by easing access to facilities and services as well as distant exchanges and collaboration. The following are also different definitions of e-learning. E-learning refers to the use of information and communication technologies to enable the access to online learning/teaching resources. In its broadest sense, Abbad et al (2009), defined E-learning to mean any learning that is enabled electronically. They however narrowed this definition down to mean learning that is empowered by the use of digital technologies. This definition is further narrowed by some researchers as any learning that is internet-enabled or web-based (LaRose et al, 1998; Keller and Cernerud, 2002).

According to Maltz et al (2005), the term 'e-learning' is applied in different perspectives, including distributed learning, online-distance learning, as well as hybrid learning. E-learning, according to OECD (2005) is defined as the use of information and communication technologies in diverse processes of education to support and enhance learning in institutions of higher education, and includes the usage of information and communication technology as a complement to traditional classrooms, online learning or mixing the two modes.

Other researchers also defined e-learning as a revolutionary approach (Jennex, 2005; Twigg, 2002) to enable a workforce with the knowledge and skills needed to turn change into benefit (Jennex, 2005). For instance Twigg (2002) described the e-learning approach as centered on the learner as well as its design as involving a system that is interactive, repetitious, self-paced, and customizable. Welsh et al. (2003) also referred to the term as the use of computer network technology, principally through the internet, to provide information and instruction to individuals. Liaw and Huang (2003) defined e-learning based on the summaries of its characteristics. In the first place, they propose a multimedia environment. Thirdly e-learning systems support collaborative communication, whereby users have total control over their own situations of learning. In the fourth place, e-learning support networks for accessing information. And fifth, e-learning allows for the systems to be implemented freely on various kinds of computer operating systems.

TYPES OF E-LEARNING

There are diverse ways of classifying the types of e-learning.

According to Algahtani (2011), there have been some classifications based on the extent of their engagement in education. Some classifications are also based on the timing of interaction. Algahtani (2011) divided e-learning into two basic types, consisting of computer-based and the internet based e-learning.

According to Algahtani (2011), the computer-based learning comprises the use of a full range of hardware and software generally that are available for the use of Information and Communication Technology and also each component can be used in either of two ways: computer managed instruction and computer-assisted-learning. In computer assisted- learning, to him, computers are used instead of the traditional methods by providing interactive software as a support tool within the class or as a tool for self-learning outside the class. In the computer-managed instruction, however, computers are employed for the purpose of storing and retrieving information to aid in the management of education.

Algahtani (2011) described the completely online mode as “synchronous” or “asynchronous” by the application of applying optional timing of interaction. The synchronous timing comprises alternate on-line access between teachers or instructors and learners, or between learner’s, and the asynchronous, to him allows all participants to post communications to any other participant over the internet (Algahtani, 2011; Almosa and Almubarak, 2005). The synchronous type allows learners to discuss with the instructors and also among themselves via the internet at the same time with the use of tools such as the videoconference and chat rooms. This type according to Almosa and Almubarak (2005) offers the advantage of instantaneous feedback. The asynchronous mode also allows learners to discuss with the instructors or teachers as well as among themselves over the internet at different times. It is therefore not interaction at the same moment but later, with the use of tools such as thread discussion and emails (Almosa and Almubarak, 2005; Algahtani, 2011), with an advantage that learners are able to learn at a time that suits them whilst a disadvantage is that the learners will not be able to receive instant feedback from instructors as well as their colleague learners (Almosa and Almubarak, 2005).

THE USE OF E-LEARNING IN EDUCATION

The development of multimedia and information technologies, as well as the use internet as a new technique of teaching, has made radical changes in the traditional process of teaching (Wang et al. 2007). Development in information technology, According to Yang and Arjomand (1999), has generated more choices for today’s education. Agendas of schools and educational institutions have recognized e-Learning as having the prospect to transform people, knowledge, skills and performance (Henry, 2001). Also according to Love and Fry (2006), colleges, universities, and other institutions of higher learning race to advance online course capability in a speedily developing cyber education market. E-learning, has come to be more and more important in institutions of higher education. The introduction and expansion of a range of e-Learning tools has been initiating several changes in higher education institutions, particularly when it comes to their educational delivery and support processes (Dublin, 2003). Just as there are different types of e- Learning, there are also different ways of employing the technique in education. Algahtani, (2011), in his evaluation of E-learning effectiveness and experience in Saudi Arabia, discovered three distinct models of using e-learning in education including the “adjunct, blended e-Learning and online”. The three ways of using e-Learning technologies as discovered by Algahtani (2011) are described below. The “adjunct e-Learning is the situation which e-Learning is employed as an assistant in the traditional classroom providing relative independence to the learners or students (Algahtani, 2011). In the blended e-Learning, Algahtani (2011) and Zeitoun (2008) explained that, in this way of using e-Learning, the delivery of course materials and explanations is shared between traditional learning method and e-learning method in the classroom setting. The third one which is the online is devoid of the traditional learning participation

or classroom participation. In this form of usage, the e- Learning is total so that there is maximum independence of the learners or students (Algahtani, 2011; Zeitoun, 2008). Zeitoun (2008) has gone further to explain that the online model is divided into the individual and collaborative learning, where the collaborative learning also consist of the synchronous and asynchronous learning (Zeitoun, 2008).

ADVANTAGES AND DISADVANTAGES OF ADOPTING E-LEARNING IN HIGHER EDUCATION

Advantages or Benefits of E-learning

The adoption of E-learning in education, especially for higher educational institutions has several benefits, and given its several advantages and benefits, e-learning is considered among the best methods of education. Several studies and authors have provided benefits and advantages derived from the adoption of e-learning technologies into schools (Klein and Ware, 2003; Algahtani, 2011; Hameed et al, 2008; Marc, 2002; Wentling et al. 2000; Nichols, 2003). Some studies give advantage of e-learning as its ability to focus on the needs of individual learners. For example Marc (2000) in his book review on e-learning strategies for delivering knowledge in digital age noted that one of the advantages of e-learning in education is its focus on the needs of individual learners as an important factor in the process of education rather than on the instructors', or educational institutions' needs. Some of the advantages that the adoption of e-learning in education, obtained from review of literature includes the following:

1. It is flexible when issues of time and place are taken into consideration. Every student has the luxury of choosing the place and time that suits him/her. According to Smedley (2010), the adoption of e-learning provides the institutions as well as their students or learners the much flexibility of time and place of delivery or receipt of according to learning information.
2. E-learning enhances the efficacy of knowledge and qualifications via ease of access to a huge amount of information.
3. It is able to provide opportunities for relations between learners by the use of discussion forums. Through this, e-learning helps eliminate barriers that have the potential of hindering participation including the fear of talking to other learners. E-learning motivates students to interact with other, as well as exchange and respect different point of views. E-learning eases communication and also improves the relationships that sustain learning. Wagner et al (2008) note that e-Learning makes available extra prospects for interactivity between students and teachers during content delivery.
4. E-learning is cost effective in the sense that there is no need for the students or learners to travel. It is also cost effective in the sense that it offers opportunities for learning for maximum number of learners with no need for many buildings.
5. E-learning always takes into consideration the individual learners differences. Some learners, for instance prefer to concentrate on certain parts of the course, while others are prepared to review the entire course.
6. E-learning helps compensate for scarcities of academic staff, including instructors or teachers as well as facilitators, lab technicians etc.

Disadvantages of E-learning

The disadvantages of e-learning that have been given by studies include the following:

1. E-learning as a method of education makes the learners undergo contemplation, remoteness, as well as lack of interaction or relation. It therefore requires a very strong inspiration as well as skills with to the management of time in order to reduce such effects.
2. With respect to clarifications, offer of explanations, as well as interpretations, the e-learning method might be less effective that the traditional method of learning. The learning process is much easier with the use of the face to face encounter with the instructors or teachers.
3. When it comes to improvement in communication skills of learners, e-learning as a method might have a negative effect. The learners. Though might have an excellent knowledge in academics, they may not possess the needed skills to deliver their acquired knowledge to others.

4. Since tests for assessments in e-learning are possibly done with the use of proxy, it will be difficult, if not impossible to control or regulate bad activities like cheating.
5. E-learning may also probably be misled to piracy and plagiarism, predisposed by inadequate selection skills, as well as the ease of copy and paste.
6. E-learning may also deteriorate institutions' role socialization role and also the role of instructors as the directors of the process of education.
7. Also not all fields or discipline can employ the e-learning technique in education. For instance the purely scientific fields that include practical cannot be properly studies through e-learning. Researches have argued that e-learning is more appropriate in social science and humanities than the fields such as medical science and pharmacy, where there is the need to develop practical skills.
8. E-learning may also lead to congestion or heavy use of some websites. This may bring about unanticipated costs both in time and money disadvantages

GENERAL CONCLUSIONS

E-learning involves the use of digital tools for teaching and learning. It makes use of technological tools to enable learners study anytime and anywhere. It involves the training, delivery of knowledge and motivates students to interact with each other, as well as exchange and respect different point of views. It eases communication and improves the relationships that sustain learning. Despite some challenges discussed, the literature has sought to explain the role of e-learning in particular and how eLearning has made a strong impact in teaching and learning. Its adoption in some institutions has increased faculty and learner's access to information and has provided a rich environment for collaboration among students which have improved academic standards. The overall literature which explains the advantages and disadvantages of e-learning suggests the need for its implementation in higher education for faculty, administrators and students to enjoy the full benefits that come with its adoption and implementation.

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Features and Effectiveness of E-learning Tools

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Introduction

The world today is a complex one with issues and concerns emerging that were absent even a generation ago. One of the significant changes that have taken place is the role of education and the realization that it is indispensable for meeting the challenges and complexities of contemporary life and society. Education has become indispensable not only for its own sake -- for making people literate and knowledgeable, but also as a means of empowering them and for the development of society. Without education, the technological revolution that continues unabated would not have been possible in our lives. In every field – agriculture, housing, health services, manufacturing, transportation and of course education, we find that technology has transformed these fields and our lives beyond imagination. The objective of most countries worldwide is to universalise education up to the age of 14 or 16 years and subsequently to allow people to choose the level and type of education that suits their needs, aspirations and resources available with different countries.

A needs to go in for higher education (HE) or education at the tertiary level, since there are many jobs that do not require it. But there are a large number of people who do go for tertiary education. In western, advanced countries about 40 % of the relevant age group people study at this level.

For India, the corresponding figures are relatively lower – about 65 % people are literate and about 10 % of the relevant age group population study at the tertiary level. Efforts are on to increase the latter to about double the present figure in the next ten years. The nature of education as well as the background of people seeking HE has also undergone vast changes. As a result, the nature of pedagogy and the resources available are also undergoing significant changes to meet the diverse abilities, needs and aspirations of different categories of learners. One of the most visible changes that is manifest today is the increasing role of technology in education, on parallel with its dominant role in today's life and society. Just as technology has become an intrinsic part of our lives, it has penetrated all areas of teaching and learning at the HE level. From radio, films and television, we have entered the computer and the internet age. Computers and their varied and ever changing applications are becoming part of the educational scene today. Computers and internet have brought in an astonishing change in the lives of most people across the world. Communications, messages, visuals, photographs can be exchanged instantaneously from one part of the world to any other.

According to Asha Gupta (2008), "We have moved from the industrial age to the networked age. We have moved from the agricultural and industrial revolutions to the information revolution". A learner or student who is making use of information technology (IT) through internet is said to be learning electronically or in other words the computers and internet are contributing to student learning. This, in common parlance, is termed *e-learning*. Perhaps the first computer delivered lecture using email, was made by WD Graziadei in 1993. Dr. Bernard J. Luskin, a distinguished American psychotherapist, is often called an e- learning pioneer, since he has popularised on line learning both as an educator and an entrepreneur in online learning and new media.

E-learning has not only become widespread in USA, Canada and Europe, it is becoming popular in India at the higher education level. In Asia, also e-learning is evolving rapidly in several directions as the economies of Japan, China, South Korea and Singapore etc expand. Computers are being used in diverse ways in education – computer aided learning (CAL), computer aided assessment (CAA), computer aided design (CAD), animation and in other applications that use simulation techniques. Simulation helps us to simulate or create an artificial situation on the computer which is a good replica of the actual situation and enables us to study various aspects of the problem on the computer under controlled conditions. These are specific applications of a generalised concept of Virtual Learning Environment (VLE) that will be discussed later.

Features of e-learning

In view of the special needs, abilities and backgrounds of learners, e-learning is becoming more and more popular. Some of the main features of e-learning are outlined below:

(i) Connectivity or networking

The students are spread over large distances and not confined to a classroom with a teacher teaching them as earlier. This technology (computers and broadband internet) allows people spread over large distances to be connected and networked and will have access to both text Features and Effectiveness of E-learning Tools 3 and visuals materials. Animation is also entering the educational scene apart from its omnipresence in the advertisement world. Moreover, in some situations there are a very large number of students – sometimes of the order of 1,000, as happens in open schooling or distance education programmes and this large number would not fit into a classroom in any case. This technology allows all these students to have access to the material available.

(ii) Flexibility

Again, because of jobs which students maybe engaged in, students have varied hours of learning – late evenings or early mornings. E-learning can accommodate the needs of such students. Similarly handicapped or ill students who find it difficult to attend regular classes would also be able to benefit.

(iii) Interactivity and collaboration

Not only is their connectivity between the teacher and the learners, the latter can also be interconnected to themselves for sharing information or for posting comments, etc. There can also be collaboration between different scholars or between teachers and students spread over large distances.

(iv) Virtual Learning Environment (VLE)

In view of the special needs of learners and the scope this technology offers institutions and scholars, a virtual learning environment (VLE) or virtual learning portal (VLP) is often created to enable interested persons or learners to have access to educational material like texts, visuals, quizzes, etc available on it. The VLEs created would of course differ from subject to subject. For example something created by psychologists or architects would differ from that created by engineers or business companies. The VLE or VLP allows access to different types of learners spread over distance and location. For all these reasons, e-learning provides an alternative means of learning which is becoming increasingly popular today. Some of benefits of e-learning have been outlined above. In section IV we discuss from the standpoint of pedagogy, what pedagogic changes are required to make teaching and learning through its means more effective and interesting for students.

Types of e-learning tools

E-learning is being implemented today in various forms and through various tools emails, blogs, wikis, e-portfolios, animation, video links, specialized software, etc. We can create through these tools a learning situation spread over distance and location that is picturesquely termed as a *virtual classroom*. Blogs or individual platforms are increasingly being used by innovative teachers to place educational materials, visuals, exercises, assignments, etc and access made available to select group of persons – students or other learners. This allows comments or questions or answers to quizzes to be put up by students which are then assessed by the teacher administering the blog.

Wikis have emerged from the concept of wikipedia which has gained currency in the last few years. It allows readers to have access to any desired topic which may consist of the history of a country, explanation of a scientific principle or latest developments in the field of psychology or education etc. One can also look up information of e-learning itself on the wikipedia. The tool of wiki has been derived from and constructed on this concept. It allows students to read, add or edit materials already put up by any person – e.g. a teacher or tutor. In this way there is interaction and collaboration of different persons interested in a particular field or topic. The material may consist of text, tabular data, visuals, photographs etc. A teacher constructs a wiki on any specific area – textile technology or retailing, etc and this material can be accessed by students. If a teacher wants to discuss mergers of companies, he can put up information of horizontal, vertical and conglomerate mergers. Video links provide links to specialised topics of a particular course or module being taught by a teacher to supplement the regular form of teaching. However, as indicated earlier, one has to be careful while selecting and using these technological tools in the classroom or in distance learning. Otherwise there is a risk that students may become so much overwhelmed by the technology that the educational or learning aspects becomes submerged by the novelty of these technological tools. Some scholars of e-

learning feel that although these technological tools are vastly effective in enhancing learning, they are just tools. Technology can be used for effective enhancement but cannot replace the academic content of a programme or module.

E-learning and pedagogic principles

Teaching in most Indian institutions of HE largely follows a traditional approach where the teacher is teaching or demonstrating some experiment and the student is following a passive role of listening, taking notes and occasionally asking questions. Very rarely does the student participate in an interactive manner. This may be termed as top-down approach where the teacher delivers and students receive – a not very effective approach to learning. Several educationists and psychologists have opposed this approach and have suggested following a different means for promoting active learning by students. For example Lewis

Elton (1999) analyses the hierarchical and cybernetic models of higher education. The former is a top-down (or traditional) approach with inherent difficulties that we are familiar with. The latter is based on a networking structure that permits greater interaction between the teacher and the taught. There are some well known theories of learning that are available in literature. Various scholars have suggested different techniques for promoting good and durable learning by students.

Some of the prominent ones are given in brief, below:

Jerome Bruner (1960) showed through his studies that effective learning takes place through a spiral path rather than just linearly. This implies that a teacher should regularly repeat and revise what he has taught before, for reinforcing and retention of learning by students.

The Russian developmental psychologist Lev Vygotsky (1896-1934) is also considered to be the founder of cultural historical psychology. The major theme of his theoretical framework is that social interaction plays a fundamental role in the development of cognition.

“Learning is based on the idea that the learner’s perspective defines what is learned, not what the teacher intends what should be learned. Teaching is a matter of changing the learner’s perspective – the way the learner sees the world. Knowledge is created by the student’s learning activities.”

Cultural: students are comfortable with e-learning methods since they are similar to search and communication methods they use in their lives,

Intellectual: interactive technology offers a new mode of engagement with ideas via online interactivity both social and material,

Practical: e-learning offers greater flexibility of provision in time and place.

However, despite the various benefits of e-learning, one should be vigilant. It should not just reduce to providing information to students about various sites or web pages, or even some educational material loaded on wikis or blogs. Any learning, including e-learning must take into account how students learn, what their background and individual needs are so that appropriate teaching methodologies can be devised and used. What poses difficulties in the absence of face to face learning in traditional teaching, becomes a major challenge in e-learning.

This is because the obvious drawback of e-learning is the absence of face to face contact. It is almost a truism that this contact encourages learning through social interaction. Thus e-learning must also include face to face student-teacher contact and should supplement and not supplant traditional forms of teaching.

Another aspect to be considered is the management of information. A beginner on approaching various e-learning sites is overwhelmed by the information available. To manage this information, to sift the relevant parts, and then to comprehend and digest the information requires the support of an experienced teacher. In this regard Biggs (op. cit) has written:

“As we learn our conception of phenomena change and we see the world differently. The acquisition of information in itself does not bring about such a change, but the way we structure that information and think what it does.” Thus, information has to be properly structured and made relevant as indicated by Biggs.

Not much research has gone into finding out students’ response to e-learning in India. In UK a considerable effort has gone into this area – just how effective e-learning is and what are students’ responses. In this regard Rhona Sharpe and Greg Benfield (2005) and Rhona Sharpe (2008) have reviewed the student experience of e-learning in HE in UK. Their articles report often inconsistent and contradictory statements made by students about their experiences. While some students have found their experience very beneficial, others find it frustrating. In general the authors report that

where e-learning is coupled with established pedagogy, students have a positive response but where a different pedagogy to the traditional one is adopted, students feel ill at ease and report an intensely emotional experience and have difficulty with time management.

Some applications of e-learning

In India, some faculty of an institute of Fashion and Design have made many interesting and novel applications of e-learning tools for enhancing learning, for determining individual learning styles and for assessment purposes etc.

Some of the tools used and their applications are given below:

It allows new ways to see, share and engage the world through the power of online video. It was used by the teacher to upload materials in the form of videos for teaching students about supply chain management. Subsequently simple questions and quizzes were also uploaded to test the effectiveness of the e-learning content. An online tool was developed for motivating students to properly use technical information for fabric development. Another tool called QuiaWeb was also used for assessment purposes. One can create educational games, quizzes, web pages, surveys and so on with its help. The quizzes were in the form of actual visuals, and not texts describing them. Students found this method of assessment novel and enjoyed it a lot. A wiki was developed by another faculty member to make a short survey of students' learning styles and to test how they learn individually and in groups. A blog was designed and material relevant to the theme of retail was posted on it.

SurveyMonkey.com is a powerful tool to create and publish one's own surveys in minutes, and then view results graphically and in real time. This software was used to assess students' responses to questions that were set up on it. It was found from the experience of students that they enjoyed this mode of e-learning since it was flexible and interesting. The teacher also reported that although it was beneficial to students, technology would not be able to drive the learning experience and replace the face to face experience of education and the traditional ways of teaching.

Conclusions

This article has considered the emergence of e-learning in the contemporary educational scene and discussed various types of e-learning tools that have been developed to cater to the needs and backgrounds of diverse nature of learners. Various benefits of these tools like connectivity, flexibility, interactivity have been outlined. However, it is also pointed out that one should be careful in the use of these technological tools so that learners do not feel overwhelmed by the technology of these tools. A brief reference is made to the different educationists and their theories of learning. It is stressed that the e-learning tools should integrate the pedagogic principles with the learning theories. It is pointed out that face to face contact that is part of the traditional approach, is also an important aspect of learning. Some applications of e-learning tools utilised by the faculty of a private higher education institute for enhancing learning and for assessment purposes in a novel manner are also described. In conclusion it is stressed that while e-learning has come to stay in today's educational environment, one should be careful in its use in order that teaching-learning becomes effective, interesting and encompasses the diverse range of students' backgrounds and abilities.

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USE OF ICT IN TEACHING – LEARNING

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INTRODUCTION

Gurukula System of Education was in vogue in India where dedicated and knowledgeable teachers, individualized and learner centre teaching, and self-motivated students eager to learn. This system changed due to increase in number of students and teachers. Teachers have been conscious about the quality of their teaching. To enhance the quality, some teachers use teaching aids, like, charts, models static & working, specimen, slides, etc. because teachers are given training both in preparation and use of Audio-visual Aids. It is a known fact that majority of schools do not have appropriate teaching aids related to the school content. Central Government realized the need of improving quality of education through the use of Television wherein most competent teacher teaches the topic with the help of most appropriate teaching aids. This helped in improving the quality of teaching in schools having no teacher to teach the subject, less competent teacher, schools having poor or no facility of teaching aids, etc. Programmes offered through television were produced by different State Institute of Educational Technology (SIET) in different languages. Researchers started thinking and using different Theories of Learning for developing Instructional Material. This gives birth to Programmed Learning Material based on Operant Conditioning Theory of Learning. Programmed Learning Materials were compared with that of Lecture Method or Conventional Method.

USE OF COMPUTER

The lust for quality is still on. This is the age of INFORMATION dominated by the Digital Technology which has influenced all aspects of human life. Education is not an exception. Now the technology is in the process of change from Digital to Photon. Photonic Technology will be available for the use of the society, majority of devices are based on Digital Technology. One such device is Computer that has the capacity to store, retrieve and process both qualitative & quantitative information fast and accurately. The computers were never developed for improving quality of teaching and learning process.

INFORMATION AND COMMUNICATION TECHNOLOGY

Networking of computers gave birth to Information Technology (IT). UNESCO considered Information Technology as “Scientific, technological and engineering disciplines and management techniques used in information handling and processing, their application, computers and their interaction with men and machines, and associated social, economical and cultural matters”. It opens up a new source of information which increased the limitation of access to information. IT was limited only to the textual mode of transmission of information with ease and fast. But the information not only in textual form but in audio, video or any other media is also to be transmitted to the users. Thus, the ICT = IT + Other media. It has opened new avenues, like, Online learning, e-learning, Virtual University, e-coaching, e-education, e-journal, etc. Third Generation Mobiles are also part of ICT, used in imparting information fast and cost effective. It provides e-mail facility also. One can access it anywhere. The ICT being latest, it can be used both at school and higher education levels in the following areas:

- Teaching
- Diagnostic Testing
- Remedial Teaching
- Evaluation
- Psychological Testing

- Development of Virtual Laboratory
- Online Tutoring
- Development of Reasoning & Thinking
- Instructional Material Development

USE OF ICT IN TEACHING

Teaching at School as well as Higher Education, mostly, concentrates on giving information which is not the sole objective of Teaching. Along with giving information, the other objectives are:

- developing understanding and application of the concepts
- developing expression power
- developing reasoning and thinking power
- development of judgment and decision making ability
- improving comprehension, speed and vocabulary
- developing self-concept and value clarification
- developing proper study habits
- developing tolerance and ambiguity, risk taking capacity, scientific temper, etc.

USE OF ICT IN DIAGNOSTIC TESTING

The **main** advantages of Computer Based Diagnostic Test.

- They do not require any special setting or arrangement. The only requirement is computer systems and software.
- The student can use it even from home if made available on school website.
- They do not need any special assistance from teacher. Unlike the paper-pencil test, it does not require paper setting and paper correction on the part of the teacher.
- It saves time on the part of the teacher and students.
- The feedback is given immediately after the test is over, which gives an intrinsic reinforcement to the student.
- The student finds it more interesting and motivating as compared to the paper-pencil diagnostic test.
- It can be updated from time to time.
- It is economical in terms of money as it requires only one time investment.

Limitations of Computer Based Diagnostic Testing (CBDT)

- The learner might find it uninteresting or monotonous as compared to paper pencil test.
- The teacher might find CBDT difficult to administer if he / she is not a computer savvy.
- It faces certain constraints, like, power cut, when it is being administered.
- The learner might not take it seriously as he / she is used to the traditional paper and pencil tests.
- The development of CBDT is costly and tedious as compared to paper and pencil test.
- The use of CBDT requires many computers which may not be available in all the schools.
- The learners who are not computer friendly might not feel at ease while giving the test on Computer.
- Certain technical problems might crop up which can distract the learner while giving the test.
- All teachers may not be competent to develop diagnostic test and especially CBDT.
- Teacher may not know computer languages that may be used for developing CBDT.

USE OF ICT IN REMEDIAL TEACHING

ICT is used for diagnosis purpose to organize Remedial Teaching Programme. Sansanwal and Dahiya (2006) developed Computer Based Test in Research Methodology and Statistics titled as Test your Understanding: Research Methods and Statistics which can be used by individual student to evaluate his learning. The student can instantaneously get the feedback about the status of his

understanding. If the answer is wrong, he even can get the correct answer. It goes a long way in improving the learning and teacher has no role to play in it. It is left up to students to use it. Such tests can be uploaded on the website for wider use. The students from other institutes can also make use of it. Not only the students even the teachers can also use it to assess their own understanding of the subject. If used by teachers before teaching the topic, they can prepare the topic properly. Such software can be used for internal assessment. Thus, ICT can be used to improve the quality of pre as well as in-service teacher's training.

USE OF ICT IN PSYCHOLOGICAL TESTING

Through research some correlates of academic achievement have been studied. Further, the psychological testing is laborious and involves money and time. Even the appropriate psychological tests are not available. This is the age of digital technology. It can be used to digitalize all the psychological tests including the scoring and evaluation. The same may be available on the website and students and teachers can use them whenever required. Even student can use it individually and can share the result with the teacher who can help the student to improve his academic performance. The digitalized psychological tests will be easy to use and economical also. Thus ICT can be used in psychological testing also.

USE OF ICT IN DEVELOPING VIRTUAL LABORATORY

Virtual Laboratory can provide lots of freedom to students and manipulate any attribute or variable related to the experiment and can see how it affects the outcome. Student wants to study the factors that can affect the focal length of a mirror. At present in the real laboratory, the student cannot manipulate many variables that he thinks might be related. They can take different types and shapes of objects, change the distance between mirror and object to any extent, change the thickness of the mirror, etc. and can see how such attributes affect the focal length of the mirror. It may be made available at the door step of each and every student by uploading it on the Website. Further each country can think of developing science Website which should give access to Virtual Laboratory and it must be free of cost which will not only help Indian students but can go a long way in helping students of Underdeveloped and developing countries.

USE OF ICT IN DEVELOPING REASONING & THINKING

Web Based Instruction (WBI) can be developed with the help of ICT. According to WBI Information Centre (1997), Web Based Instruction (WBI) is an innovative approach to distance learning in which computer based training (CBT) is transformed by the technologies and methodologies of the World Wide Web (WWW), the Internet and Intranets. WBI presents content in a structure format that allowing self-directed, self-paced instruction on any topic. WBI is media rich learning fully capable of evaluation, adaptation and remediation, all independent of computer platform.

USE OF ICT IN DEVELOPING INSTRUCTIONAL MATERIAL

At present there is a shortage of qualified and competent teachers in all most all subjects at all levels. Their lectures should be digitalized and made available to all the users. It will enhance the quality of instruction in the classrooms. The teacher can use them in the classrooms and can organize discussion after it wherein the new points can be added both by the teacher as well as students. It will make the teaching effective, participatory and enjoyable.

CONCLUSION

Rapid changes in technology will ensure that ICT will proliferate in the classroom. It is predicted that there will be many benefits for both the learner and the teacher, including the promotion of shared working space and resources, better access to information, the promotion of collaborative learning and radical new ways of teaching and learning. ICT will also require a modification of the role of the

teacher, who in addition to classroom teaching will have other skills and responsibilities. Teacher training institutions, professional development schools, societies and public educational agencies must continue to identify study and disseminate examples of effective technology integration that answer professional development needs. Many will become specialists in the use of distributed learning techniques, the design and development of shared working spaces and resources, and virtual guides for students who use electronic media. Ultimately, the use of ICT will enhance the learning experiences for children, helping them to think and communicate creatively. ICT will also prepare our children for successful lives and careers in an increasingly technological world.

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INNOVATIVE LEARNING AND TEACHING WITH ICT

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Introduction

Learning is the way from what we know to what we do not know, from what we understand to what we do not understand, from questions to answer (Gingulis .Our society often talks that students are taught using old educational methods .Students feel boring and lose interest in learning .Today's education demands new educational methods that develop skills of learning ,creative use of knowledge .So educational method is an important part of educational system from which students get knowledge and skills ,develop their cognition skills and cooperation with teacher.

Educational method

Educational method is a way where teacher leads students from unknown to known ,from no skills to skills, a way to develop kid's possibility to think(M.Scarkin). The choice of educational system is very important to develop the skills of students.

Educational methods are classified into

- ❖ verbal (lecture ,discussion)
- ❖ visual (demonstration)
- ❖ practical (laboratory tasks).

Teaching methods can be divided into

- ❖ gathering information and execute
- ❖ explaining and reproductive methods
- ❖ methods of development and searching.
- ❖ instructive and productive methods.

The influence of the educational method depends on the form of work. Common method used by most of the teachers is present the topic using text books and the students must memorise it .After the teaching ,the teacher ask questions and the students should answer for it. There is no room for interaction between the teacher and the students .The students feel boring in the classroom , they could not gain new knowledge . If the teacher explains the theme with new methods, the student will get the knowledge and execute it for practical purpose. The teacher may practice new method and execute it to reach the students.

Researches have acknowledged that effectiveness of teaching depends on the use of video materials , group discussion and practical activities. Contemporary educational method like interactive learning makes the process more interesting and provides cooperation among teachers and students.It promotes students to use creative thinking and analyse the gained information for practical applications. The different learning activities and it's outcome is tabulated.

Learning activities	information gathered	Learning outcome
Read	10%	Describe ,explain
Hear	20%	
View videos	30%	Apply ,practice
Demonstration	50%	
Workshop	70%	Analyse ,creative
Stimulation , presentation	90%	

Now a days ICTs are making dynamic changes in educational methods and influences the student society. ICTs provide both teachers and students new teaching and learning experiences.

ICT

ICT stands for information and communication technologies. ICT is defined as diverse set of technological tools and resources used to communicate, to create , disseminate, store and manage information. These technologies include computer, internet, LCD projector, video technology and broadcasting technologies. Though text books, TV, radio have been used for educational purpose over the years, computer and internet have impacted the educational process.

Garrison and Anderson suggested that the application of ICTs in the teaching-learning process can improve the quality of teaching, increase learner motivation , facilitating and acquisition of basic skills. Application of ICTs like visuals, animation and multimedia software that combine text, sound and images can make the learning concrete. The process of ICT is development of human mental resources which allow people to develop creative, intellectual ability and apply the existing knowledge to produce new knowledge (Shavinina).

For many years teachers and students have limited resources. But with ICT teachers and students gain access more direct form of communication and access to sharable resources , the quality of learning settings will continue to grow(Oliver).

It is evident that traditional educational environments are not suitable for preparing learners to be productive in work places . Grimus pointed out that by teaching ICT , the students are prepared to face future developments based on proper understanding. ICT supported teaching method could initiate constructive learning experience with improved memory retention.

Advantages of using ICT in teaching-learning process

ICT in education makes major differences in the teaching-learning process. ICT extends formal and non formal educational opportunities to all sections of people. With internet , learning materials in each and every subject can be accessed from anywhere at any time.

Benefits for teachers

- ❖ The role teacher is redefined in this information age.
- ❖ Access students data is easy
- ❖ The design and preparation of course materials is simple.
- ❖ With ICT teachers are no longer dispensers of knowledge but productive facilitators.
- ❖ Teachers can respond better to different kind of learners.

Benefits for students

- ❖ High quality lessons with illustrations and animation.
- ❖ Increases fluency, reading and writing skills.
- ❖ Develops activity , self learning and self responsibility.
- ❖ Easy communication with teachers and external people.

Use of ICT in the quality of education

ICT in education stimulates the students to listen and active involvement in the lesson . The basic skills and concepts are transformed into higher order thinking and creativity.

Disadvantages of ICT

Blatchford and Whitebread suggests that the use of ICT in the foundation stage is unhealthy and hinders learning. Some teachers who are not familiar with new technologies have negative

opinion about ICT . Moreover the cost involved to establish and maintain ICT equipments in educational institution is high , all could not afford such facility.

Conclusion

The continual use of ICT in educational process improves the quality and accessibility of education. The adoption of ICT in education have a positive impact on education . The learners can access the education regardless of time and geographical barriers . ICT avails wide variety of course materials , best methods , best courses which can improve teaching environment and academic achievement of students.

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INNOVATIVE LEARNING AND TEACHING WITH ICT

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Abstract

Teaching and learning with ICT has both advantages and disadvantages. As a matter of fact , ICT helped to improve the process of innovative teaching and learning .Visual learning is one of the major reimbursements of using ICT. But technology is not a panacea that can replace teachers and face -to -face classroom teaching . It is inevitable to use ICT for the advancement of slow bloomers. Innovative teaching has faith on ICT. Teachers who follow conventional teaching methods could not influence modern learners . At the same time, technology has got some limitations too - ICT can be used according to the need of the audience .This paper focuses the importance of using ICT for innovative learning and teaching.

ICT in Innovative Teaching and Learning

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Introduction:

ICT in teaching and learning: Widespread but part of a blend: ICT use, in terms of e-mail, word-processing, PowerPoint, and the Web, has become standard as part of the teaching and learning process. But this has not radically affected the nature of this process; rather, ICT has become part of the blend of on campus delivery. This trend is seen in terms of ICT policy and objectives relating to ICT, as well as in the way that ICT use has been implemented into practice. In particular, Web-based systems are seen as valuable and leading to more efficient practices. This second main theme emerging from the study is related to the first: ICT use, in terms of email, PowerPoint, word processing and Web resources, has become commonplace, but in a way that only gradually is stretching traditional on-campus practice. The lecture remains the “core medium”, the instructional form, which is most highly valued. However, ICT has clearly become part of the blend, serving as a complement to already existing instructional tools.

Objectives

The objectives of the study were to:

- Gain a further insight in and understanding of the institutional, policy-based responses and initiatives with respect to the use of ICT in higher education.
- Further develop and test four scenarios on strategic choices of HE institutions with respect to the use of ICT in their education functions.
- Predict the different strategic pathways that higher education institutions may chose with respect to the use of ICT in higher education and the critical conditions and implications at various levels that are related to them.

Research Questions

The central question for the study was:

- Which scenarios are emerging with respect to the use of ICT in higher education and how can future development be predicted and strategic choices be based on these scenarios?

Sub-questions are:

1. What strategic choices do institutions make with respect to the use of ICT in response to these external conditions and development and how do they view their future missions, profiles and market positions?
2. Which external conditions and developments influence the choice of higher education institutions (HELs) with respect to the use ICT and how are these perceived and analyzed by key different actors?
3. What role does external collaboration play in achieving the strategic objectives?
4. Which internal conditions and measure are being taken in order to achieve the strategic targets?
5. What are the implications of the various strategic choices / models for:
 - Technology use, including course management systems
 - View(s) on teaching & learning and specific pedagogical models and dimensions
 - Time, workload and satisfaction of staff?

Conceptual Framework

The conceptual framework of the study consisted of a model predicting the variables that will have an impact on an institution's ICT and educational delivery approach.

There were many variables involved in an institution's decision to offer its educational program in a certain way to its students. These variables form a complex system, where each variable has an influence on the others, and where new impulses are continually challenging the system to make new responses. Such a dynamic system is difficult to capture and study. For the research, variables were looked at individually that in reality never appear in isolation but in combinations with other variables. A model to study variables that influence an institution's dominant approach to educational delivery and the use of technology in the delivery was by definition incomplete and overly simplistic. However, key variables can be identified that repeatedly have been shown to have a major impact on policy, implementation, practice, effectiveness, and eventually on an institution's general approach.

ICT Policy and objectives

The fact that ICT use is common relates to the policy of the institutions. Respondents indicate that 97% of the institutions have a formally stated ICT policy. In 54% of the cases this is a combined bottom-up and top-down type of policy: there is an institutional wide-ICT policy that serves as a framework for faculty-specific plans. In 19% of the cases the policy is bottom-up: faculty or department-levels formulate the ICT policy with no link to the institutional-level decision-making. In only 9% of cases, is the policy characterized as only top-down: an institution-wide policy to be implemented in all faculties. In the remaining cases, respondents were not aware of the nature of the policy (15%) or there was no policy (3%).

As for the objectives of the ICT policies of the institutions, quality improvement is prominent. In addition, the main objectiveness position of the institution and to increasing flexibility.

Looking at which activities in the institution actually involve the use of ICT at present, it seems that ICT is especially linked to innovation in teaching and learning, which may well be related to the main objective of quality improvement. Furthermore table 13 again confirms that both at present and also in the future, the institutions are mainly focused on teaching the traditional student group. However, in the future, more focus is on teaching international students and providing lifelong learning.

Main objectives of the ICT policies

Extent to which current and future activities involve the use of ICT

Activities which involve use of ICT

- Innovation in teaching and learning
- Externally funded research
- Teaching 18-24 years old
- Internally funded research
- Interaction with business and industry
- Teaching international students
- Providing lifelong learning

Technology use, teaching & learning practice

ICT as part of a blend, gradually stretching the traditional ways of teaching and learning, is clearly established. The general level of technology infrastructure in the institutions is valued as between average and high. The available technology is used more often for organizational purpose (including course preparation) and outside classroom activities than for communication and in-

classroom activities. Furthermore, it seems that the use of email and the use of Web resources is becoming a common phenomenon in the educational practice, whereas other ICT forms, such as wireless solutions and conferencing tools, are used little or in a much more limited extent.

Looking at the actual use of the various available tools and applications other than email and Web resources we can observe that most options are used only to a very limited extent (between “uncommon” and “somewhat”). Most popular (but only scoring just above “somewhat”) are presentation tools (Power Point etc.), personal bookmark collections and database tools.

These type of rather basic use of available ICT options are usually focused on supporting the also basic processes of students writing reports, and instructors transferring knowledge (e.g. oral presentation or reading materials). All other instructional orientations are also used, but less often. It is interesting to see that the use of testing and other formal assessments still is not supported much through the use of ICT, although many software solutions are available on the market.

Face-to-face interaction and direct communication between instructors and students and among students is still very important in the way in which instructors teach. ICT is used in a way that is complementary to this, but does not replace what traditionally has occurred in the teaching and learning process.

Conclusion

The achievement of a successful programme outcome was clearly related to the design of the learning experience. However, as has been noted by others, the best learning design does not automatically guarantee learning. Student’s perceptions of the learning context in terms of assessment, and of the effectiveness of teaching, influence their approach to learning. There is no reason to believe that students behave differently when using information technology. A number of significant issues relating to learning context were uncovered in this study. The first of these relates to students’ use of information technology programmes, which sometimes differed from teachers’ expectations. Many of the programmes were designed and developed with the expectation that students are independent learners, keen to learn and to explore new ideas. There was, however, significant evidence from both the questionnaire results and the case studies to suggest that:

- Students’ perceptions of assessment is a major influence on their approach to using or participating in the IT programme;
- Students’ experience of working in groups is sometimes negative;
- Students’ previous experience of teaching influences their acceptance of new learning designs.

Several leaders expressed disappointment when they realized that students did not undertake the optional activities, follow extra hypertext links provided or participate in activities which were not related to assessment. Some programmes did not modify students’ assessment to reflect the change in learning process and the outcomes expected, and students were aware of this. In other cases, students simply did not exhibit the same desire to learn as teachers had expected.

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Parameters in Teaching and Learning

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“Quality is never an accident; it is always the result of higher intention, sincere effort, intelligent direction and skilful execution; it represents the wise choice of many alternatives”

- William A. Foster

Introduction

Teaching and learning are the two components which decide the quality of education in particular and society as a whole. Teachers and students need to participate actively for a healthy environment and a successful educational system.

A teacher is considered to be an architect who lays a strong foundation before he builds. The duty of the teacher is not to remain constricted to classroom teaching but to create progressive ideas of learning and promote students interest towards creative thinking and fulfil ulterior motives.

Learner differs in their learning styles and in responding to certain variables in the instructional environment. Learners differ in the need for encouragement to learn a task as well as on frequency and kind of motivation for learning.

Teaching

Teaching is an art and demands patience and perseverance. A good teacher is not only a disseminator of knowledge, but also a motivator, mediator, mentor and facilitator facilitating the teaching and learning process, improves teaching-learning process, improves teaching skills and updates knowledge and methodologies.

Teaching is a tri-polar activity which involves active participation of the teacher, the learner and the teaching learning situation leading to the modification and the behaviour of the learners.

Teaching is a complex activity and it may suffer if the artist faces exclusively on technique. Instructors may focus on expected learning outcome through maximum student involvement and learning.

Learning

The main aim of education is to produce the desired changes in the behaviour of the learners. The learners are exposed to certain experiences and those experiences produce changes in behaviour pattern which are designated as ‘learning’ the ultimate goal of teaching learning process. Learning must involve the fulfilment of the social needs of the student and enable him to contribute to his own needs and to the economic development of the country.

Learners are consumers of education. Innovative changes should be implemented to fulfil the machine of learning process.

Teaching and learning should be a joint effort in which stakeholders voice their suggestions. Today’s educational system caters to the needs of the students, demand of the nation and world at large.

PARAMETERS INFLUENCING TEACHING AND LEARNING PROCESS

Administration

Educational administration is to enable the right people to receive the right education from the right teacher at a cost within the means of the State under condition which will enable the pupils to profit by their training.

Educational administration is defined by Paulmont as, in large by part, “influencing the group of human beings, pupils to grow towards objectives, utilizing a second group of human beings, the teacher as agents and operating in the selling of a third group of human beings, the public, variously concerned with both objectives and means used to achieve them”.

Student’s satisfaction and involvement

Student’s satisfaction refers to the amount of physical and psychological energy a student develops from the experiences in the institutions during the course of the study.

A frequent interaction with the faculty is more strongly related to satisfaction with the college than any other type of involvement. Students, who interact frequently, express satisfaction with all aspects of their institutional experience student’s friendship, variety of courses, intellectual environment and even the administration of the institution. Thus, finding ways to encourage greater student involvement with the faculty could be a highly productive activity on most college campuses. Students are the products of the teacher and their development depends on the environment in their education institution.

Teaching and learning resources

The term teaching and learning resources includes a wide range of ingredients believed to enhance student learning physical facilities (laboratories, libraries, audio and video aids) human resources (well trained faculty members, counsellors and support personnel) and fiscal resources (financial aid, endowments and research funds). If adequate resources are available, teaching and learning will be efficient.

Well experienced and research oriented faculties will also strengthen the educational environment.

Large numbers of high achieving students are resources that enhance the quality of learning environment for all students on the institution.

Student’s involvements also provide a link between the subject matters, resources, curriculum and instructional methods used for teaching and learning process. Student’s interest in the particular curriculum to achieve the effects intended, must elicit desired learning outcome behaviour. Student’s involvement reflects how much time and energy they devote to their learning process.

Leadership

Whether an individual is labelled as principal or director he is an administrator. Management is often used in profit seeking organization whereas administration is used in education and used non-profit programme. The administrator is responsible for providing effective and consistent leadership for those activities needed to reach the organisation goals. The functions of the administrator can be grouped into a) Planning, b) Organizing, c) Staffing, d) Directing, e) Controlling.

In addition to direct management of the organization the administrator must be

- 1) An educational leader who will provide both enthusiasm and direction to the instructional program.

- 2) Be an insightful leader on both curricular and co-curricular activities.
- 3) Overall planning, including budget, personnel and facilities.
- 4) Help, define and interpret goals.
- 5) Provide opportunities for improvement of employees.
- 6) Provide the best to the stakeholders.

Teacher Student Relationship

Teaching cannot happen without teachers entering in a relationship with students. For a positive relationship mutual respect, shared responsibility for learning, commitment towards goal, effective communication and feedback, cooperation and willingness to learn, effective leadership and problem solving are the key factors.

Effective teacher are trustworthy open and secure, cooperative, reciprocal and interactive manner.

Role of Teachers

Teachers' play a crucial role in their student's all round development, physically, mentally, spiritually, psychologically motivating the student in the right direction.

The teachers have to select a wide range of teaching methods with reference to the content and also with reference to the learning styles of the students. Teachers need to be equipped to the latest innovations in educations to play their role properly the objective of the teacher is to develop the students a security of a stable self-image and confidence in his own abilities.

Role of Learners

The success of teacher is reflected in the performance of the learners. Students play a crucial role and realise the responsibilities toward national development and in building up a good a society. Students should develop self-confident, improve their talents, skills, and explore the unexplored qualities.

Curriculum

All institutions must constitute curriculum committee that plan curricula and instructional method which need to be regularly updated the structure and composition of the curriculum must describe the content, scope and sequencing of the courses including the balance between core and optional subjects.

Infrastructure

The elements of infrastructure that support the teaching and learning process must directly need to be monitored and upgraded on a regular basis. Particular attention to libraries and laboratories in addition to class room, sports facilities and auditorium needed. Institutions should provide broadband and connectivity to all students and teacher for effective teaching and learning.

Instructional skills

The activities of a teacher in teaching demand a variety of skills to be exhibited. The instructional skills are

1. Planning and preparation
2. Presentation and communication
3. Organizing group interactions
4. Evaluation
5. Guidance and counselling services

Media

Educational technology uses the various gadgets which are called media. Media are the carriers of messages for transmitting sources of information. Media may be used for information or for instruction. Instructional media are the tools for teaching and avenues for learning. Technology made an impact in the field of education by making available sophisticated aids to the teacher to teach more effectively.

It deals with specifying the objective s of teaching a topic, utilizing the products of appropriate technology to improve and facilitate effective learning and finally evolving suitable evaluation procedures.

Student's satisfaction

Teaching must channelize the student's energy in a constructive manner and encourage students to develop interest in learning and enjoy intellectual freedom. The changing social needs and rapid changing society demands a better teaching and learning process.

Rating of the Teachers by Students

A student plays an important role in the development of a teacher indirectly. Rating of the teachers by the students can help in the development of teacher's performance. Hence student's participation in the enhancement of education involves both the faculties (teaching) and students (learning) simultaneously.

Evaluation

Evaluation is the last step of teaching and learning process. The teacher has to evaluate the success of planning, organizing and learning activities. The teacher has to evaluate cognitive, affective and psychometric learning outcomes in the evaluation process. Evaluation outcome depends upon the teaching strategies, tactics and aids.

Evaluation ascertain how far learning objectives could be achieved it diagnoses the weakness of instructional procedures and remedial solutions and improvement. It gives reinforcement and feedback to teachers and students.

Conclusion

Education is a developmental process. Educational system should undergo qualitative changes. Teaching and learning should therefore have not a simple transformation but a sort of transmutation with qualitative changes.

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Performance Evaluation of Universities

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Abstract

Indian higher education is witnessing presence of Universities established by the government or its agencies and the deemed / private universities. India is also going to witness entry of foreign universities in the near future. The researcher undertook the study of a cross section of few select Universities in the country. The study was carried out amongst the academia, industry, practising professionals and the public. The study was carried out to make a comparative performance evaluation of Universities that have been established by the Government or its agencies and that of the Deemed Universities. Parameters that were taken up for study were categorised into Teaching, Research, Placement, Financial and Overall aspects. The Data collected consist of both Primary and Secondary. Secondary data collected consist of information that are available in the public domain. Statistical tools that were applied reveal that there is a strong positive correlation between the degree of importance given to research and innovation in teaching and the placements the students of the universities get. It has also been revealed that there is a significant relationship between the need for strengthening up the infrastructure of the Universities in the light of likely entry of foreign universities. It is also observed that there is a higher need for CSR Spending by Deemed Universities and relatively in the case of bigger universities. While it is observed that Universities established by the Government or its agencies are rendering yeoman service, it is also observed that there is an increasing need for such universities to improve their standards of services. The study reveals that there is a strong positive correlation between a better service and a Common Effective Academic Regulator, especially in the light of domestic, foreign and government level universities.

Excellence in Teaching and Learning through Quality Awareness

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“EDUCATION IS NOT THE FILLING OF A PAIL, BUT THE LIGHTING OF A FIRE”

In this modern era, teaching and learning has become a corporate gateway rather than an essential tool for a well being. In any concept, quality plays an important role in determining the standards. In the field of teaching and learning, excellence is rewarded only when realization of quality and quality integration happens. Before relating quality with education, let us read between the lines of quality awareness. It means, having the knowledge of quality. In teaching and learning, quality can't be defined in a simple manner. It involves the content of the learning, the perceptions and ideas, attitudes and feelings towards a group or an individual. When the teacher and the learner are aware of the purpose of education and its implementation in practical cases, then the excellence of teaching and learning will be derived through quality awareness.

HIGHER EDUCATION IN COMMERCE-CHALLENGES AND OPPORTUNITIES

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ABSTRACT

Modern Business commerce Education cover diversified fields of education and research in different aspects of business environment. It includes Finance, Marketing, Accounting, Human Resource Management, Entrepreneurship Development, Commercial and Business Law etc. In order to attain Economic Growth of a region or a country, one needs professional Economists and Accountants with advanced practical knowledge to enable to evaluate and analyze the complexities of the large scale business and other Financial institutions in one side and to face the stiff competition from the MNCs from the other side. Here the commercial experts who have trained in different aspects of business environment have to play a very important role. Keeping in view the above facts and demand of the time, prospects of Commerce Education seems very bright. To avail the advantage of Commerce, a lot of educational institutions have been opened to educate students in the field of Commerce with more knowledge on practical.

Keywords: Higher Education, Commerce, Students, Business, E-commerce. Finance

Interweaving Human Resources with E-Learning Resources for the effective enhancement:

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Introduction:

Education is something that shapes one's life and personality and defines success. Education is the backbone of the society. Nehru has aptly remarked that "The destiny of the nation in teaching is designed in the classroom". As the technology is dynamic, that must be utilized in a proper channel. The term e-learning in learning caters to the needs of learners. It has a vast presence in almost every field. It brings new dimensions in education sector. When incorporated brings a tremendous change, in education. Interweaving the Human resources teaching and student with the E-learning resources we could ensure effective quality enhancement in education.

Resources:

A resource is a source or supply from which benefit is produced. Typically resources are materials, energy services, staff, knowledge or other assets that are transformed to produce benefit.

Human resources:

Human resource refers to the human effort in the production of goods and rendering services. It can be defined in terms of skills, energy, talent, abilities or knowledge. Human resources are the most important and vital assets of the nation as the productivity of all the other resources depends upon people. Human resources are the people and their skills, knowledge, consequently it is the total qualities of the human being.

Resources in teaching:

In order to enhance the teaching learning process, the teacher utilizes the resources that are easily available. Now teacher as a human resources uses some other resources like blackboard, flash cards, chants, object, flannel board, bulletin board, models etc. with an ultimate aim of increasing the effect of teaching learning process. These resources can also be categorized as traditional resources in teaching.

Digital Natives:

The person who has born after 1980's is called digital native. We call them such because the technological growth is higher in this generation. Technology is a dynamic factor which keeps on changing. According to the change in technology, human also are expected to change for the fruitful result. When there is failure in adapting the change, there will be always some saunter in the advancement of life.

E-Learning:

The term e-learning in learning caters to the needs of learners. It has a vast presence in almost every field. It brings new dimensions in education sector.

Features Of The E-Resources:

- E-resources are huge information resources.
- E-resources provide recent information.
- E-resources are many times in multimedia and are interactive.
- E-resources have multidisciplinary approach
- E-resources provide various search options.

- E-resources provide easy citations.

Advantages Of E-Resources:

The following are the advantages of e-resources.

- Quick searching of data.
- Linking from one to other resources.
- Ability to implement multimedia elements.
- No risk to damage.
- Able to make hyper link.
- Available for 24 hours a day.
- E-published may be less costly than paper.
- It saves printing and mailing costs.

E-Learning and Quality enhancement :

E-Learning provides powerful means of improving the quality of education which is supported by Mayer's theory of multimedia learning. It enhances the quality in the following ways:

- Generates new knowledge
- Creates learning communities.
- Stimulates learning creativity
- Focuses on quality study material
- Motivates those who are not learning.
- Satisfy students' intellectual demands
- Increases students passion for learning.
- Adjust different learning styles better than traditional classroom.
- According to students learning needs faster/slower or repetitions is possible.
- Encourages learner for learning.
- Improves information retention.

Interweaving Human Resources with E-Learning Resources:

When students are using the technology they are in an active role played by them in traditional classes. The teacher's role changes as well. The teacher is no longer the center of attention. The teacher plays the role of facilitator. When these changes are merged with the technologies, the ultimate change would be a fruitful one. Availability of learning resources like computer lab, internet facility, trained faculty, electricity, e-classroom, required software are key factors in e-learning. These facilities at school, colleges, at home will play major role in developing life of e-generation.

Conclusion:

Any concern which clutch at the new technology as soon as it is discovered shall reap a rich harvest. So there may some motivation required to undergo training and learning the new things to incorporate in the teaching learning process for effective enhancement of quality of education. So let us thrive for it. Right use of Right thing always provide success.

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MODERN PRESPECTIVE AND STRATEGIES IN TEACHING, LEARNING AND EVALUATION

Theme : Use of Multimedia and Animation in learning

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ABSTRACT

Presently, traditional educational approaches have resulted in a mismatch between what is taught to the students and what the industry needs. As such, many institutions are moving towards implementing modern technology such as multimedia as a solution to producing graduates who are creative, can think critically and analytically, and are able to solve problems. In this Paper we focus on using multimedia technology as an innovative teaching and learning strategy in a modern educational system

Currently many institutions are adapting modern perspectives, as a solution to producing graduates who are creative and can think critically, analytically and solve problems. Since knowledge is no longer an end but a means to creating better problem solvers and encourage life long learning.

Multimedia and Education

With multimedia, the Communication of the information can be done in a more effective manner and it can be an effective instructional medium for delivering information. A Multi – Sensory experience can be created for the audience, which in turn, elicits positive attitudes towards learning. The Power of Multimedia lies in the fact that it is multi-sensory, stimulating the many senses and also interactive enabling the end-users to control the content and flow of information. This has introduced important changes in our educational system. The evolution of multimedia has made it very possible for learners to become involved in their work. This would make them active participants in their own learning process.

E-LEARNING TECHNOLOGIES AND ITS APPLICATION IN HIGHER EDUCATION

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Abstract

There is a general agreement that we have entered the information economy, that higher Education is a critical element in this Knowledge society. Notwithstanding, there is also a widespread skepticism as to whether educational system will be able to overcome their traditional inertia and respond to the Challenge of the Knowledge-based revolution. In that respect of many higher educational institutions are turning to e-learning Technologies for improving the quality of learning by means of access to resources, services, long distances collaborations and exchanges.

Introduction

The application of Information and Communication Technologies (ICTs) have become so attached to contemporary educational delivery worldwide that it has virtually become impossible to deliver or receive formal education without the application of such advanced technologies in the processes. The all encompassing term –ICT- which covers a wide range of technologies for gathering, storing, retrieving, processing, analyzing and transmitting or presenting information is, in reality, practically indispensable in the delivery of contemporary education.

Meaning e-learning

- the use of electronic technology to deliver, support and enhance teaching and learning (Learning Skills Development Agency [LSDA] definition)
- the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration. (EU)
- if someone is learning in a way that uses information and communication technologies (ICTs), they are doing e-learning. (DfES)

Advantages of eLearning

Benefits of e-learning include that it can be:

- **The A4 of eLearning - Anytime, Any Place, Any Pace, Any Subject:** e-learning materials can be accessed at the most convenient time for the learning, if the course material is well constructed then learning can take place in short segments and can be customised to suit the learner's needs.
- **Empowerment:** Students are in charge of their own learning.
- **Flexibility:** e-learning material can be accessed in a non-sequential way, enabling students to navigate content in different ways, or obtain a global view before tackling the details of individual units.
- **Cost Effective:** large numbers of students can have access to the same materials but can be supported by peer-to-peer or student-to-tutor support services thus reducing the cost of delivery.
- **Up-to-date Content:** Course content is located in one place so it can be easily updated and can provide direct links to supporting materials such as Internet and library resources.

- **Tailored Learning:** the time needed to learn a particular topic or skill is reduced or "compressed" as learning can be modified to suit the users needs and requirements. E-learning can provide a variety of learning experiences including interactive elements.
- **Retainable:** the smaller and more relevant the learning is the easier it is to capture and remember.
- **Socio-inclusive:** students can learn in a relatively anonymous environment without the embarrassment of failure and/or socio-cultural bias from personal contact.
- **Consistent:** all students get the same standardised set of materials from e-learning.
- **Interactive:** well constructed materials will have elements of interactivity through simulations etc. which will underpin and enforce the learning.
- **Collaborative:** The use of groups and teams working together in collaborative learning and learner-learner interaction enforces employability skills.
- **Used To Track Student Performance:** student usage of the materials can be monitored and early potential drop-out can be detected and given remedial support.
- **Used to Facilitate understanding:** of concepts by offering alternative ways of visualising materials and alternative explanations to those given in a single delivery mode such as a lecture, seminar or tutorial (for example, multimedia and hypermedia).
- **Used to Give Instant feedback:** from online self-assessment or formative assessment particularly through multiple choice question formats.
- **Used for Self Assessment:** students can be offered automatically-marked self-assessment exercises to identify skill/knowledge levels and learning needs before engaging with course content.

How is e-learning delivered?

The development of technologies employed to provide e-learning has resulted from a "push-pull" relationship between providers and the public. Technological advances has created awareness and demand among users, while usage has pushed providers to further develop technologies {Gladieux and Swail 1999}. According to Sherron and Boettcher {1997}, these advances have produced over the years for different generations of distance education technologies. Key differentiating characteristics of the generations of technologies of distance education include:

- ✓ The number of individuals that can be simultaneously supported in communication {i.e., one-way, two-way, or multiple-way communication};
- ✓ The amount and types of information {voice, video, data} that can be communicated {i.e., whether the communication channels are "broadband" or "narrowband"};
- ✓ The speed at which that information is communicated {i.e., whether the return rate is fast or slow}.

Technology Trends

The promise of widely available, high quality web-based education is made possible by technological and communication trends that could lead to important educational applications. Citing from the Web-based Education Commission report {Aug.2000}, a summary of the key trends that have been characteristic of technology is as follows:

- ✓ The first trend is toward greater broadband access and better data packet handling capabilities. This trend for learners means a richer delivery of content via interactive environments than today's delivery of simple text.
- ✓ The second trend is that of pervasive computing in which computing, connectivity, and communications technologies connect small, multipurpose devices, linking them by wireless technologies. Such wireless solutions may enable underdeveloped and remote areas to quickly take advantage of the Web via wireless technologies. Such wireless solutions may enable underdeveloped and remote areas to quickly take advantage of the Web via wireless phones, two-way pagers, and handheld devices.

- ✓ The third trend is digital convergence which merges the capabilities of telephone, radio, television, and other interactive device. This include course3 materials, software, and reference guides delivered via text, video, audio formats or direct satellite connections to homes which offer another pathway for rich content delivery {American Public Television Stations. E-Testimony to the Web-based Education Commission. August, 31 2000}.
- ✓ The fourth trend is towards accelerating the pace of educational technology advances through the establishment of technical standards for content development and sharing
- ✓ The fifth trend is the emergence of “adaptive technology” that combines speech recognition, gesture recognition, text-to-speech conversion, language translation, and sensory immersion to change the very substance of network-enhanced human communication.
- ✓ A final trend is the dramatic drop in the unit cost of broadband. Bandwidth will decrease in cost and increase in power more rapidly than the advances in chip technology.

Conclusion

Conclusion is that higher educational institutions across the world can no longer ignore the inherent potential of e-learning. Advanced ICT is in the form of computers, the Internet and hand-held devices have become an unalienable part of higher education. E-learning strategies that do not only enhance the use of technology to deliver flexible learning for students but also look into important pedagogical issues that surround the delivery of e-learning. Consequently; as access to these advanced technologies continues to improve by the day it is expected that competition between higher educational institutions and countries in taking advantage of the potential of e-learning will largely depend on the quality of learning delivered.

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CHARACTERISTICS OF AN EFFECTIVE CLASS ROOM

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Introduction

Creemers and Reezigt (1999) identified four factors that are responsible for creating a classroom condition that significantly decides students learning. These factors are:

- ✓ Expectations of students outcome
- ✓ An orderly classroom environment
- ✓ Well functioning relationships in the classroom between teacher and students between the students.
- ✓ Physical environment of the classroom.

Many of the researches have demonstrated that there is significant link between the classroom environment and students academic progress. A thoughtful attention and planning creative use of time caring teacher behavior effective utilization of the resources supports the enthusiasm and the needs of the diverse learners and enhances their performance. In a well managed class room students are not forced to learn instead they are made to discover the joy of learning. Another advantage of working out a supporting and organized classroom is that teachers time be well managed and utilized.

Classroom Organization

The classroom configuration has a powerful effect on students motivation and readiness to learn life with in the class room tends to become more active, comfortable and productive when all things with in it are organized well and managed effectively. The designing of the space within the classroom will produce and positive influence on both teaching and learning. Many teachers neglecting to put emphasis on the physical order within the classroom faces problems with managing student's activities and behaviors. Teachers have to take responsibility of providing the best possible physical layout and arrangement of teaching learning material within the classroom.

Classroom Management / Control

It is the most important aspect of classroom management that teacher hold a control over the manner students behaves. It actually decides the amount of preparation put into smooth conduct of teaching tasks. Several times, teachers have experienced that students behavior problems interfering with the smooth proceedings of the classroom. In such conditions by trying to make them know about the negative consequences of such behavior has been an important tool to modify their behaviors. Positive implementations by controlling and managing their behaviours are always better. Again punishments when appropriately and more cautiously used has been effective in eliminating undesirable behaviors however it is not encouraged in the present times because it is found to have greater negative impacts.

Certain techniques that can be favorably considered by teachers that would help them to establish a control over students and manage the classroom conditions well are:

- ✓ Make the students to clearly understand how you expect them to behave within the classroom. Without being too much rigid establish clear guidelines regarding their expected work and behavior. Also teach them to follow schools policy on behavior.
- ✓ Whenever they behave badly avoid open confrontation, instead calm down the situation enable the child to recover their normal composure and then separately inform the consequences of such behavior and that you expect them to behave well.
- ✓ If a student is found to disturb others with his disruptive behavior do not ignore it instead take steps to approach him with corrective measures for setting it right such need to correct behaviors.
- ✓ Before giving them learning activities to be carried out in the classroom it is important to give them clear instructions about their participation and how they are supposed to do it. The whole activity has to be carefully monitored and reviewed.

- ✓ Learn and utilize a range of non verbal body language that is very useful to control disruptive students during classroom instruction. Several times it works to control them without a break in between the teaching and without waste of time.

Classroom Learning Atmosphere

The learning atmosphere that prevails within the classroom is one vital factor that can predetermine the success of students learning. Teachers by demonstrating the true passion for teaching can provide a stimulating the classroom environment that favors true learning. They should wisely use their acquired knowledge experience and skills to create and sustain an effective teaching–learning atmosphere within the classroom.

A responsible interaction between the learner and the learning materials under the guidance of a good teacher in a conducive learning atmosphere will be productive and contributes towards their development. Special features of a student centered classroom with ideal learning conditions are

- ✓ It increases student's motivation to learn making learning more enjoyable.
- ✓ It enables in acquiring a host of learning skills thus making learning more easier and rewarding.
- ✓ It makes the students to realize the value of their learning time and motivates them to use it more productively.
- ✓ It makes them to feel the need to learn and thus work hard to acquire more satisfying learning experiences.
- ✓ it stimulates student to learn by sharing, work collaboratively by appropriately using the learning materials.
- ✓ It naturally induces a controlled discipline, order and they feel a sense of security that enable them to respond freely.
- ✓ It gives chances for active participation and to explore and find possible opportunities to progress towards the set goals.

Teachers therefore have to take time to plan and put in the best efforts to create and sustain ideal classroom conditions that will propel the student towards better learning. Here are some of the vital practices that help in structuring a supportive classroom atmosphere with ideal conditions for learning:

- ✓ Establish a trusting and encouraging relationship with the student so that they develop a respectful attitude towards teachers and value their teaching
- ✓ Consider active involvement of all students in planning decision making executing the programmes. Valuing their opinion and suggestion will encourage them to be more active behave well and contribute creatively.
- ✓ Make students to consciously thing about their learning acquire better learning skills that will enable them to get the best from the classroom study.
- ✓ Provide chances during the classroom learning to exhibit their learning progress. This will enable them to keep self informed about their learning progress and in setting higher targets.
- ✓ Understand the individual differences among the students and be flexible enough to accommodative variety of learning activities suiting the need and learning diversity of the students.

Classroom Activities

The planning of activities for students should obviously depend on the level of the students their number in the class and the time available for conducting the activities. It is also important to ensure that the activities conducted have relevance to student's lives.

The following suggestions will enable teachers to utilize activities as an important classroom tool to minimize student's passivity and make learning more challenging and joyful.

- ✓ Organize the classroom for specific activities by selecting appropriate place to conduct it and providing scope for students to comfortably involve in the activities. Proper organizing of the classroom for activities ensures smooth conduct of it.
- ✓ Decide in advance whether students will work independently or in groups. Small groups of students are ideal for practical activities because there will be more scope for participation.

- ✓ Provide them clear instructions before they begin the activities and each student should clearly know how to proceed with activity. Careful monitoring has to be done to observe the participation of each student and to find out the progress of work.
- ✓ All the necessary materials and resources for conducting the activities should be kept ready before beginning the task. There should be sufficient equipments and materials for effective conduct of the activity and students should have ready access to the materials.
- ✓ When student in the class room perform practical tasks teachers should work on developing specific skills so that they improve their skills and learn new skills which will finally turn out to be a great outcome from it.
- ✓ Allow free flow of student's imaginative responses, creativity and ideas to enhance the effectiveness if they conducted activities. Activities with opportunities to think reason, investigate, apply and design have value that is more educational.

Classroom Assessment / Evaluation

Classroom assessment is a crucial work of all teachers and is done before during the after the lessons. Assessment of students learning work helps teacher in charting out the progress of students and in planning appropriate teaching strategies which suites their learning needs and pace. Students have to be provided with suitable opportunities in the classroom and demonstrate their understanding of whatever learnt so that proper feedbacks can be provided to areas of difficulty. Systematic classroom assessment and evaluation helps in:

- ✓ Knowing the extent of students learning progress and provide them the necessary feedback.
- ✓ Providing necessary guidance and support to overcome and cope with any of their learning difficulties.
- ✓ Identifying students into different groups based on their learning abilities. This offers teachers to concentrate separately on students with learning problems, learning disability and the gifted ones and provide them suitable learning activities.
- ✓ Assessing the impact of classroom teaching and in taking up measures to improve the presentation.
- ✓ Reporting the progress of the child to the parents and the school administrators for further course of actions.
- ✓ Formulating goals, designing the learning experiences according to the increasing needs of the learners.
- ✓ Increasing the motivational level of the students for more better performances and for providing opportunities to demonstrate their understanding and skills.

Conclusion

Teachers should put out their mind to provide necessary feedbacks to the students after every authentic classroom assessment. It will help them to build on their strengths and strengthen their weakness. After assessing the student work you have to decide about individual face to face and general feedbacks. General feedback is given when a common mistake is one and faces to face feedbacks to individual student.

E-Learning Resources

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INTRODUCTION

E-Learning is an all-encompassing term generally used to refer to computer-enhanced learning, although it is often extended to include the use of mobile technologies. It may include the use of web based teaching materials and hypermedia. E-learning can also refer to educational websites such as those offering worksheets and interactive exercises for children.

E-Learning

- E-learning is learning on internet time.
- E-learning is the convergence of learning and the Internet.
- E-learning uses the power of networks, primarily those that rely not only on Internet technologies but also satellite networks and digital content to enable learning.
- E-learning is the use of network technology to design, deliver, select, administer and extend learning.

Levels of E-Learning

It may be categorized into four, from the very basic to the very advanced. They are,

- Knowledge databases
- Online support
- Asynchronous training
- Synchronous training

Important Features of E-learning

- Learning is self-paced and gives students a chance to speed up or slow down as necessary.
- Learning is self-directed, allowing students to choose content and tools appropriate to their differing interests, needs and skill levels.
- It accommodates multiple learning styles using a variety of delivery methods geared to different learners; more effective for certain learners.
- Designed around the learner.
- Geographical barriers are eliminated, opening up broader education options.
- 24X7 accessibility makes scheduling easy and allows greater number of people to attend classes.
- On demand access means learning can happen precisely when needs.
- Travel time and associated costs are reduced or eliminated.
- Overall student costs are frequently less.
- Fosters greater student interaction and collaboration
- Fosters greater student/instructor contact.
- Enhances computer and internet skills.

E-Learning Resources

While the down economy continues to hurt funding to our schools, more and more teachers are looking to web-based services to help educate their students. Whether it's through open resource

projects like CK-12, virtual classrooms like those in Second Life, or through their purposing of tools like Twitter, millions of teachers are finding innovative resources to engage their students. If you're a teacher, here are seven great tools to get you started.

1. **Scitable:** Geared towards advanced high school and college science students, Nature Education launched Scitable to provide free online access to more than 180 overviews of key scientific and genetics concepts. The tool consists of a 220-article content library (often cited from members of the Nature Publishing group, more than 200 virtual classrooms set up by teachers across the globe, and a mentor network of experts poised to answer student questions. Educators and students can upload their own content for exploration and discussion, while the content library provides a number of articles accepted as valid sources at the university level.

2. **Edutopia:** The George Lucas Educational Foundation launched Edutopia in the hopes of creating educational best practices for multimedia in the classroom. The site includes online polls, curated blogs, assessment tools and a dedicated magazine for educators at the K-12 levels. The 2009 Webby Award winning site's best content is in its library of high-production videos for teachers and educators.

3. **LearnHub:** LearnHub is a network where members can create their own communities, share lessons, chat, create tests and tutor each other online at no cost. Schools create their own virtual classrooms where students complete assignments, play games and share photos and text. One of the great features of this site is that the site's report generator allows teachers to track users' progress. While the content is not as in-depth as Scitable's, this is a good site for standardized test preparation and basic K-12 education exercises. For more examples of test preparation sites, see our RWW list of resources.

4. **Moodle:** Moodle is a free open-source course management platform designed to help teachers create better online resources. Microsoft Education Labs recently announced a new Live@edu plug-in for Moodle. Now in addition to providing lesson plan, assignment and quiz-making tools for teachers, schools also gain access to Outlook Live for e-mail, Office Live Workspace for document sharing, Windows Messenger for chat and Windows Live SkyDrive for 25 GB of storage. This tool is slightly more advanced than some of the others in the industry, but it does offer a number of scalable solutions.

5. **Edmodo:** Edmodo is a private micro-blogging service for schools that allows teachers to edit privacy options within their virtual classrooms. Educators generate a join code and students log-in to chat, link to files, share notes and check their collective calendars for upcoming exams, quizzes and Pro-D days. While some of the other tools we've presented offer an open-access learning environment, this invite-only service offers students the chance to utilize web-based multimedia tools while allowing teachers to control an online discussion's security.

6. **YouTube Edu:** YouTube Edu allows students and educators to access lectures from leading educators across the country. For example, Yale and Brandeis University professors upload their lessons for public enjoyment. One of the most popular Channels is the National Programme on Technology Enhanced Learning – a collaboration launched by the Indian Institutes of Technology and Science in Bangalore.

7. **ESL Video:** ESL Video allows language educators to create quizzes from virtually any video on the internet. From here they can embed their quizzes into their classroom sites or redirect students to the ESL Video domain. Teachers tailor their video quizzes to specific learning units or create simple vocabulary quizzes like the one I made below using YouTube videos. While this tool may not be as sophisticated as some of the above services, its merit comes from the fact that teachers can incorporate pop culture products into their lesson plans with very little effort. Judging by the fact

that the below Miley Cyrus video has more than 92 million YouTube views, teachers may be able to harness this tool to ignite a love of learning.

Tools Used for E-learning

- task structuring support: help with how to do a task (procedures and processes),
- access to knowledge bases (help user find information needed)
- alternate forms of knowledge representation (multiple representations of knowledge, e.g. video, audio, text, image, data)

Numerous types of physical technology are currently used: digital cameras, video cameras, interactive whiteboard tools, document cameras, electronic media, and LCD projectors. Combinations of these techniques include blogs, collaborative software, ePortfolios, and virtual classrooms.

Audio and video

Radio offers a synchronous educational vehicle, while streaming audio over the internet with webcasts and podcasts can be asynchronous. Classroom microphones, often wireless, can enable learners and educators to interact more clearly.

Video technology has included VHS tapes and DVDs, as well as on-demand and synchronous methods with digital video via server or web-based options such as streamed video from YouTube, Teacher Tube, Skype, Adobe Connect, and webcams. Telecommuting can connect with speakers and other experts. Interactive digital video games are being used at K-12 and higher education institutions.

Teaching and learning online

Collaborative learning is a group-based learning approach in which learners are mutually engaged in a coordinated fashion to achieve a learning goal or complete a learning task. With recent developments in smartphone technology, the processing powers and storage capabilities of modern mobiles allow for advanced development and use of apps. Many app developers and education experts have been exploring smartphone and tablet apps as a medium for collaborative learning.

Computers and tablets enable learners and educators to access websites as well as programs such as Microsoft Word, PowerPoint, PDF files, and images. Many mobile devices support m-learning.

Mobile devices such as clickers and smartphones can be used for interactive audience response feedback. Mobile learning can provide performance support for checking the time, setting reminders, retrieving worksheets, and instruction manuals.

Google Classroom allows instructors to create, administer, and grade assignments. While Google Classroom ultimately strives to create a paperless learning environment, there are many different types of learner; a learning environment like the one that Google Classroom projects does not work for everyone.

Social networks

Group webpages, blogs, wikis, and Twitter allow learners and educators to post thoughts, ideas, and comments on a website in an interactive learning environment. Social networking sites are virtual communities for people interested in a particular subject to communicate by voice, chat, instant message, video conference, or blogs. The National School Boards Association found that 96% of students with online access have used social networking technologies, and more than 50% talk online about schoolwork. Social networking encourages collaboration and engagement and can be a motivational tool for self-efficacy amongst students. Every student has his or her own learning requirements, and a Web 2.0 educational framework provides enough resources, learning styles, communication tools and flexibility to accommodate this diversity.

Webcams

Webcams and webcasting have enabled creation of virtual classrooms and virtual learning environment. Webcams are also being used to counter plagiarism and other forms of academic dishonesty that might occur in an e-learning environment.

Benefits of E-Learning

Some of the significant benefits of e-learning are given below. They are,

- Convenience and Portability
- Cost and Selection
- Flexibility
- Higher Retention
- Greater collaboration
- Global opportunities

Suggestions to make E-learning feasible

The following are some of the suggestions to make e-learning feasible.

- Encourage all the universities to have networking among themselves by providing funds generously.
- Minimize the cost of computers and motivate the learners to purchase computers by offering loans with minimum interest.
- As internet functioning needs the use of telephone, telephony should be technologically improved and the Government should make all the local calls free; thereby Internet accessing will be cheaper.
- Internet facilities should be provided to the rural areas and computer literacy program needs to be conducted in rural areas.
- Make the knowledge of computer compulsory for all types of recruitments.
- Develop the habit of reading through computer monitors.

Limitations

- System is reliant on I.T. equipment and network.
- Authoring software requires a license.
- Only supports objective questions
- Testing of higher order skills is difficult but not impossible.

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E-LEARNING IN INDIA: BENEFITS, PROSPECTS AND CHALLENGES

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INTRODUCTION

In India, globalization has generated a good vibration and life for higher education. The new era of technology enabled education or 'eLearning' is displacing the outdated traditional methods of learnings. eLearning is also a broader term than 'on-line learning' or 'online education' which generally refers to purely web-based learning. In cases where mobile technologies are used, the term 'm-learning' is used.

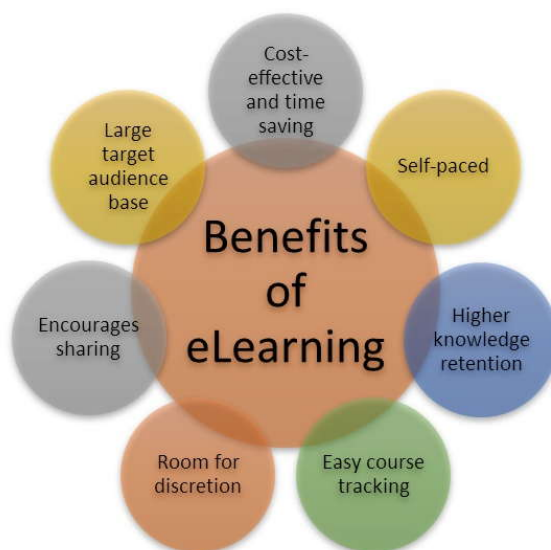
The uniqueness of eLearning is that it provides the learner the opportunity to learn anytime, anywhere. eLearning is the only method of learning, where three distinct learning styles of auditory learners, visual learners, and kinesthetic learners are incorporated. And by using learning style tests, eLearning can locate and target individual learning preferences. eLearning is inclusive of a maximum range of learning styles, preferences, and needs. Advanced learners are allowed to speed through or bypass instruction that is redundant while novices slow their own progress through content, eliminating their own frustrations.

OBJECTIVES OF THE STUDY

- To study about the benefits of eLearning.
- Future Prospects of E-Learning
- Challenges faced by e-learning

BENEFITS OF E-LEARNING

A multi-billion dollar industry does not spring to fame without an amazing array of benefits tagging along, which make the millions all the more worthwhile. Let's have a look at some of them.



It is Cost-Effective and Saves Time

E-learning courses do not demand students to be present in the classroom necessarily. Students can proceed with the courses from the comfort of their homes or any place they deem convenient. This cuts down the money on travel and saves a lot of time.

Let's say an institute condenses 2900 hours of classroom training into:

- ❖ 600 hours of web-based training
- ❖ 500 hours of classroom training
- ❖ 300 hours of distance learning

This cuts the time spent on the training by about 52%. And the cost reduces considerably too. It is a win-win situation.

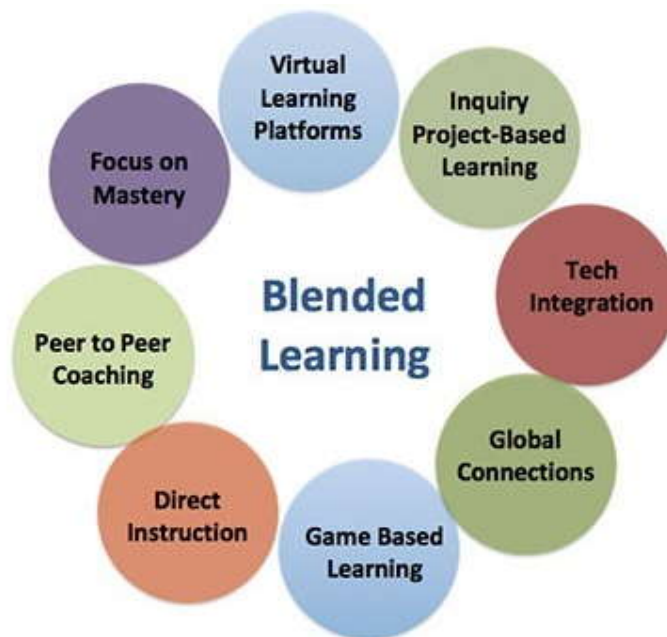
The self-paced aspect of e-learning shines through all obstacles

The best part about e-learning is that you can study whenever you want. Be it in the bus, the bookstore, the coffee shop, at home, on the run, or absolutely anywhere you want. And you can learn it at your own pace. With e-learning, there is no need to rush through your concepts and your understanding. If you hit a block, you can take a break and come back to it according to your own convenience. That is what **self-paced learning** is all about. Sounds fantastic, doesn't it?

E-learning results in a higher knowledge retention

To make education interactive and interesting, e-learning employs numerous methods of:

- Blended learning approach
- Gamification



Thus, knowledge retention increases and the time spent on learning becomes more productive.

Tracking Course Progress becomes Easier

A well-implemented **Learning Management System (LMS)** makes tracking course progress more effective and easy. In addition, LMS makes assessing students' capabilities a piece of cake. Therefore, an e-learning system, which includes an LMS, can prove to be quite effective in **tracking learner's progress**.

E-learning provides ample room to be discreet

It so happens sometimes that a student lags behind in the class, while others find themselves quite in sync with whatever is being taught. And that student feels shy about questioning the incomprehensible, since that would shower him with unwanted attention. The whole situation ends up being extremely embarrassing. Such a situation can be completely avoided in e-learning and any failure can be kept from getting out in the open. Therefore, the chances of being jeered at can be reduced.

This appeals a lot to every student, mostly co-workers. So, these are what attract students to e-learning.

- ✓ E-learning allows enough room for students to manage their tasks as and when they find convenient.
- ✓ It also provides a step-by-step explanation procedure that caters to students of any level of comprehensive skills.

E-learning takes personal learning to a whole new level.

E-learning encourages sharing

E-learning provides students with a chance to share the knowledge acquired through online communities. A discussions forum can add value to the learning procedure, by incorporating scope for fruitful collaboration and conversation. Sharing of resources in e-learning is also an extremely healthy way for education to flourish.

The target audience base for e-learning is quite large

The two important aspects that act as barriers to learning are:

- ❖ Location
- ❖ Time-frame

This limits the student base considerably. With e-learning, educators have access to a wide base of students, since distance isn't a hindrance anymore. In a study conducted by the Open University, it was revealed that distance learning courses consumed 90% less energy and resulted in 85% lesser emission of carbon dioxide per student!

FUTURE PROSPECTS OF E-LEARNING

India has become a major source for e-learning content development owing to the country's highly educated workforce and low-cost benefits. It is about time for the concept of e-learning to be fully incorporated in the country's education system.

I'll give you two facts to validate the rise of e-learning:

- ✓ With Internet users expected to rise to a hefty 500 million by 2020, there is no way that e-learning can stay behind.
- ✓ By June this year, the number of mobile Internet users is slated to rise to 213 million, paving a way for dynamic education to reach every learner.

The current **annual growth rate of India's e-learning industry** has been estimated to be at 17-20% and is set to reach the \$40 billion market size by 2017. More than half of the country's population falls under the expected target reach for e-learning.

E-learning trends set to change the future of education

The various aspects of e-learning are yet to be explored properly by the population and several tools have not been used till now to facilitate e-learning in India. However, a few trends that e-learning might encompass stand out from among the rest.

Some of these trends are discussed below.

Micro learning

In a nutshell, micro learning is all about learning through activities, which involve micro-steps in digital environments. The best aspect about this concept is that, these activities can be integrated in the everyday activities of a student's daily routine and reduces their burden. In addition, micro learning eliminates the need for educational sessions for a specific duration, since learning is imparted through snippets of information embedded in the day's activities. In simpler words, micro learning is going about a problem in small steps. And its implementation is easy. For example, you have come across a problem. This is how you would achieve a solution to it through micro learning.

Personalized learning

Personalized learning deals with a curriculum that is tailored to fit the needs of every individual learner. Its steps involve:

- ❖ Educational programs
- ❖ Approaches
- ❖ Strategies

All of these are designed to meet the distinct learning interests, aspirations, and other such categories of a learner's preference.

It strays in a completely opposite direction to the one-size-fits-all concept. However, in addition to providing unlimited choices for learners, this type of learning also puts forward certain goals that need to be met by every learner.

Gamification

Gamification is a very intricate process of augmenting game-based thinking into education. The idea is to employ gaming techniques in a non-game based context. This can encourage students to reach the solution in an interactive and fun way that's no more monotonous.

CHALLENGES FACED BY E-LEARNING

Even though the concept of e-learning is set to create major waves in the education sector in the recent years, the challenges are streaming in. Many organizations have embraced e-learning with open arms, but the problems amount to a staggering sky-high heap when it comes to implementing e-learning at the school level.



The Internet is still a luxury in many parts of the country.

A vast majority of the Indian population resides in rural areas. The lack of infrastructure in such areas gives rise to connectivity and accessibility issues. However, the Government of India has been instrumental in removing such barriers by implementing various measures. Two schemes have been launched to aid in e-learning implementation:

- ✓ National Mission on Education through Information and Communication Technology (NMEICT)
- ✓ National Program on Technology Enhanced Learning

These two schemes have been solely launched to implement ICT in video and web-based learning.

E-learning does not cover a lot of certification courses.

The certifications that come with conventional learning is somehow lost in the e-learning concept of education. The e-learning courses do not cover a lot of certification courses that are recognized by colleges and universities across India or abroad. This pulls the e-learning courses out of sync with any stream of school education.

It would take some time to renovate the conventional educational system.

The traditional education methods have enlightened generations for decades now. Even though you might feel that they have overstayed their welcome, it has become increasingly difficult for us to overthrow tradition completely and embrace newer methods of learning with open arms. However, renovations in the old-school methods have seen the light of the day with technology entering the industry. But a complete makeover in education with the e-learning methods would still require some time to establish itself.

Not all learners are tech-savvy.

Even though the e-learning courses are available in a wide range of platforms for learners to choose from, a basic knowledge of how to operate those devices is imperative to benefit from the courses. And being a **tech-savvy teacher** becomes a primary requisite. Therefore, before e-learning could be implemented, learners and educators need to be educated about the ins and outs of technology to facilitate a smooth learning curve.

Lack of awareness

If a large part of the population isn't aware of the amazing benefits that e-learning has to offer, then how can it be expected to change the face of education in the coming years?

Awareness plays a key role in making the proliferation of e-learning a joy ride. With that lacking, the future becomes questionable.

While the challenges pose an impending storm rocking the e-learning ship violently, the numerous benefits calm the waves to a soothing cradle. E-learning streams in like a shining ray of hope, making education accessible for:

- ❖ Anyone
- ❖ Anywhere
- ❖ Anytime

And with the astonishing figures depicting the prospect of a brighter future, e-learning is here to stay. Let us know your views about e learning in India.

CONCLUSION

The e-learning system not only provides learning objectives, but also evaluates the progress of the student and credit can be earned towards higher learning institutions. The Internet allows for learning to be directed at one's current objectives. E-learning is naturally suited to distance learning and flexible learning, but can also be used in conjunction with face-to-face teaching. Lusk says that the "e" should be interpreted to mean exciting, energetic, enthusiastic, emotional, extended, excellent, and educational in addition to "electronic" that is a traditional national interpretation. This broader interpretation allows for 21st century applications and brings learning and media psychology into the equation. Hence, the students not longer want to just learn about but want to learn to be, by constructing content instead of absorbing. Students require interactivity and using modern technologies like e-learning, M-learning, virtual learning and web learning as a teaching device allows this interactivity to occur. With the emergence Social networking, blogging, and You Tube, students expect to be able to utilize modern technology on the fly to connect everything.

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Modern Methods in use in Education

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ABSTRACT

- Technology-driven classrooms - (using Computers, Tablets, Smart phones etc)
- Continuous comprehensive evaluation - (Regular Assessments)
- Cross-curricular connections – (*knowledge, skills and understandings from various subject areas..*)
- Inquiry-based learning (Interaction, clarification and Questioning)
- Emphasis on understanding of concepts (Hearing, Attention & concentration, play skills, Receptive language)
- Linking curriculum with life (individual interest)
- Emphasis on skill building, life skills and values (Communication, Self-awareness, decision Making)
- Smart interactive boards (White Board, interactive display)
- BYOD – Bring your own device (the new and emerging technology)
- Collaborative learning (work together, sharing ideas, unity)

MODERN TECHNIQUES IN TEACHING, LEARNING AND EVALUATION

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Introduction

Education is something which makes a man self-reliant and self less – Rig Veda.

The aim of the education is the development of valuable personality and spiritual individuality – Ross.

The purpose of education is not just making a student literate but adds rationale thinking, knowledgeability and self sufficiency. When there is a willingness to change, there is hope for progress in any field. Creativity can be developed and innovation benefits both students and teachers.

Importance of Education:

“Education is the manifestation of perfection already in man”

–(Swami Vivekananda)

Education is a light that shows the mankind the right direction to surge. If education fails to inculcate self-discipline and commitment to achieve in the minds of student, it is not their fault. We have to convert education into a sport and learning process has to generate interest in the students and motivate them to stay back in the institution than to run away from it. Education should become a fun and thrill to them rather than burden and boredom. It is an integral part of their growth and helps them become good citizens. Education is an engine for the growth and progress of any society. It not only imparts knowledge, skills and inculcates values, but is also responsible for building human capital which breeds, drives and sets technological innovation and economic growth. In today's era, information and knowledge stand out as very important and critical input for growth and survival. Rather than looking at education simply as a means of achieving social upliftment, the society must view education also as an engine of advancement in an information era propelled by its wheels of knowledge and research leading to development.

Teacher and teaching :

W.M.Ryburn says that the success of teaching process will depend mostly on the general

personality and quantities of life and character of the teacher. The teacher should have a sound mind in a sound body.

All progress depends on education and education further depends on the quality of teachers.

Teacher must be strong, healthy and quite careful about cleanliness. His voice should be clear and pleasing. He must be sincere, frank and honest in all his dealings.

Teaching is not learning and learning is not teaching. The two process are different in nature, and each is controlled by a different individual. Yet, the teacher, while not being able to control the learning process, cannot develop the instructional process(objectives, strategies and activities, measurement, evaluation) without he presumes to be happening within the learner.

Learner and learning:

A concern for individual differences in learners is nothing new. Indeed, individual differences are mentioned often in the best educational literature. Most educators read and hear and use the term so often that they begin to assume that meaning is inherent in it. Few of us give enough thought to the nature of individual differences and their relationship to instructional methodology.

One way of responding to the question of individual differences is to suggest that every human being has a personal learning style. If this is true, it may mean that the survival of the learner is directly related to the correlation between teachers teaching strategies and learners learning style.

Methodology of teaching:

The world of today is often called as the age of communication and information. Today circumstances are changed, teaching demands new pedagogy, new interaction and visions in the field of learning. Today's education is incomplete, if it not involves new information and communication.

Some of the modern techniques that can be engaged in teaching are:

ICT in Education: ICT's are electronic and/or computerized devices and associated human interactive materials that enable the user to employ them for a wide range of teaching and learning process in addition to personal use.

- 1. Web Based Education:**

Web based education means the most extreme form of "online education" that uses, streaming videos and the more advanced functionalities available in educational software and where there is no actual face to face contact between the teacher and the students. It is of Asynchronous and synchronous type. It allows the education to go the learner rather than the learner to their education.

- 2. Video conferencing:**

It is an electronic means which can bring together 3 or 4 people in two or more locations to discuss or share the use of two-way and one-way video, both full motion and show scan, electronic blackboards, facsimile, computer graphics, radio, satellite, and videotext. This technology supports shift away from traditional lessons that are short, isolated and educator-centered to a student-focussed interactive experience.

- 3. EDUSAT(Educational satellite):**

EDUSAT, launched by GSLV-F01 in September 2004 is India's first thematic satellite dedicated exclusively for educational services. INSAT is being used to provide ETV service for primary school children in Tamil, Marathi, Oriya, Telugu and Hindi. These programmes, provided by UGC, are part of its countrywide classroom programme.

- 4. E-BOOK:**

An E-BOOK also known as digital book is an e-text that forms, the digital media equivalent of a conventional printed book, sometimes restricted with a digital rights management system. It is an electronic version of printed book. They are usually read on dedicated hardware devices known as e-Readers or e-book devices.

- 5. Digital Library:**

A Digital library is a library in which collections are stored in digital formats and accessible by computers. The digital content may be stored locally or accessed remotely via computer networks. A digital library is a type of information retrieval system.

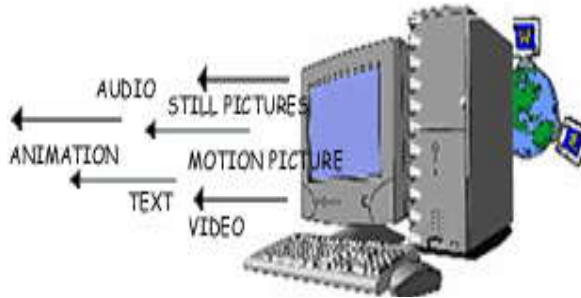
Types of Learning:

I hear and I forget. I see and I believe. I do and I understand. - Confucius

Some of the innovative techniques in learning are as follows:

- 1. Multimedia learning process:**

Multimedia, is the combination of various digital media types such as text, images, audio and video, into an integrated multi-sensory interactive application or presentation to convey information to an audience. The teacher uses multimedia to modify the contents of the material. It will help the teacher to represent in a more meaningful way, using different media elements. These media elements can be converted into digital form, modified and customized for the final presentation. By incorporating digital media elements into the project, the students are able to learn better since they use multiple sensory modalities, which would make them more motivated to pay more attention to the information presented and retain the information better.

Chart 1 - MULTIMEDIA ELEMENTS

2. E-Learning:

E-Learning may be network-based, Intranet-based or Internet-based, which includes text, video, audio, animation and virtual environments. It is a 'synchronous type of Web based Education. It is the use of network technology to design, deliver, select, administer, and extend learning. Its components can include content delivery in multiple formats, management of the learning experience and a networked community of learners, content developers and experts.

3. Computer managed learning:

It is concerned with the use of computer to perform the tedious and time-consuming management task of learning. In CMI the computer gathers, stores and manages information to guide students through individualized learning experience. Based on the records it maintain it give to the students vocational guidance.

Innovations in Evaluation:

Evaluation is an indispensable part of the education system. It is useful as a good tool

for assessing the student's progress in learning and observing their overall development. The findings obtained in evaluation form the basis for bringing about changes in the syllabus so as to make it more relevant and purposeful.

Many web based evaluation tool are available which can be choosen accordingly to the learners, but as compared to the traditional paper based evaluation, web based evaluation are more helpful in the progress of the students especially to the scientific subjects.

Take a situation in which you want to test the students knowledge in computer language coding. In these situation computer based testing are most helpful as the debugging option helps the students to correct themselves the mistakes as compared to the traditional methods.

A wide variety of **Questionnaire** and **Case study tools** are available online which can be used to evaluate the needs of the students in the learning process.

The data was also analysed according to the given questionnaire to summarize the results from the lecturers' point of view. Ten key important factors have been identified for conducting computer based testing;

Reduce the stress, Over-head and ambiguity, Reduce marking time, increase the accuracy of marking, It is a more efficient and effective method, Does not need to read line by line to check syntax for mistakes, Reduces the unpleasant situation of reading untidy handwriting, Increases the transparency of marking, Hundred percent of certainty about the correctness of the coding, Production of a working output, Ability to use different techniques or methods on their own, No need to stick to one method and debugging method can be used to test the logical errors in the programs. According to the survey conducted the software developers from the industry also preferred to have a testing method for their in-house on the job training programmes.

Thus, the development in the field of Information technology also brings up development in the field of Education.

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AN OVERVIEW OF E-LIBRARY

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Introduction:

A **electronic library** is a special library with a focused collection of digital objects that can include text, visual material, audio material, video material, stored as electronic media formats (as opposed to print, microform, or other media), along with means for organizing, storing, and retrieving the files and media contained in the library collection. Digital libraries can vary immensely in size and scope, and can be maintained by individuals, organizations, or affiliated with established physical library buildings or institutions, or with academic institutions. The digital content may be stored locally, or accessed remotely via computer networks. An electronic library is a type of information retrieval system

Software implementation:

Institutional repository software is designed for archiving, organizing, and searching a library's content. Popular open-source solutions include DSpace, EPrints, Digital Commons, and Fedora Commons-based systems Islandora and Hydra.

History:

Early projects centered on the creation of an electronic card catalogue known as Online Public Access Catalog (OPAC). By the 1980s, the success of these endeavors resulted in OPAC replacing the traditional card catalog in many academic, public and special libraries. This permitted libraries to undertake additional rewarding co-operative efforts to support resource sharing and expand access to library materials beyond an individual library.

An early example of a digital library is the Education Resources Information Center (ERIC) which was "born digital" in 1966.

Terminology

The term *digital libraries* was first popularized by the NSF/DARPA/NASA Digital Libraries Initiative in 1994. These draw heavily on Vannevar Bush's essay *As We May Think* (1945), which set out a vision not in terms of technology, but user experience. The term *virtual library* was initially used interchangeably with *digital library*, but is now primarily used for libraries that are virtual in other senses (such as libraries which aggregate distributed content). In the early days of digital libraries, there was discussion of the similarities and differences among the terms *digital*, *virtual*, and *electronic*.

In the context of the DELOS, a Network of Excellence on Digital Libraries, and DL.org, a Coordination Action on *Digital Library Interoperability, Best Practices and Modelling Foundations*, Digital Library researchers and practitioners and software developer produced a **Digital Library Reference Model** which defines a digital library as: "A potentially virtual organization, that comprehensively collects, manages and preserves for the long depth of time rich digital content, and offers to its targeted user communities specialized functionality on that content, of defined quality and according to comprehensive codified policies.

A distinction is often made between content that was created in a digital format, known as born-digital, and information that has been converted from a physical medium, e.g. paper, through digitization. It should also be noted that not all electronic content is in digital data format. The term hybrid library is sometimes used for libraries that have both physical collections and electronic collections. For example, American Memory is a digital library within the Library of Congress.

Some important digital libraries also serve as long term archives, such as arXiv and the Internet Archive. Others, such as the Digital Public Library of America, seek to make digital information from various institutions widely accessible online.

Software:

There are a number of software packages for use in general digital libraries, for notable ones see Digital library software. Institutional repository software, which focuses primarily on ingest, preservation and access of locally produced documents, particularly locally produced academic outputs, can be found in Institutional repository software. This software may be proprietary, as is the case with the Library of Congress which uses Digiboard and CTS to manage digital content.

Digitization:

In the past few years, procedures for digitizing books at high speed and comparatively low cost have improved considerably with the result that it is now possible to digitize millions of books per year. Google book-scanning project is also working with libraries to offer digitize books pushing forward on the digitize book realm.

Advantages:

The advantages of digital libraries as a means of easily and rapidly accessing books, archives and images of various types are now widely recognized by commercial interests and public bodies alike.

Digital libraries may be more willing to adopt innovations in technology providing users with improvements in electronic and audio book technology as well as presenting new forms of communication such as wikis and blogs; conventional libraries may consider that providing online access to their OP AC catalog is sufficient. An important advantage to digital conversion is increased accessibility to users. They also increase availability to individuals who may not be traditional patrons of a library, due to geographic location or organizational affiliation.

- **No physical boundary.** The user of a digital library need not to go to the library physically; people from all over the world can gain access to the same information, as long as an Internet connection is available.
- **Round the clock availability** A major advantage of digital libraries is that people can gain access 24/7 to the information.
- **Multiple access.** The same resources can be used simultaneously by a number of institutions and patrons. This may not be the case for copyrighted material: a library may have a license for "lending out" only one copy at a time; this is achieved with a system of digital rights management where a resource can become inaccessible after expiration of the lending period or after the lender chooses to make it inaccessible (equivalent to returning the resource).
- **Information retrieval.** The user is able to use any search term (word, phrase, title, name, subject) to search the entire collection. Digital libraries can provide very user-friendly interfaces, giving click able access to its resources.
- **Preservation and conservation.** Digitization is not a long-term preservation solution for physical collections, but does succeed in providing access copies for materials that would otherwise fall to degradation from repeated use. Digitized collections and born-digital objects pose many preservation and conservation concerns that analog materials do not. Please see the following "Problems" section of this page for examples.
- **Space.** Whereas traditional libraries are limited by storage space, digital libraries have the potential to store much more information, simply because digital information requires very little physical space to contain them and media storage technologies are more affordable than ever before.
- **Added value.** Certain characteristics of objects, primarily the quality of images, may be improved. Digitization can enhance legibility and remove visible flaws such as stains and discoloration.

- **Digital prevention:**

Digital preservation aims to ensure that digital media and information systems are still interpretable into the indefinite future. Each necessary component of this must be migrated, preserved or emulated. Typically lower levels of systems (floppy disks for example) are emulated, bit-streams (the actual files stored in the disks) are preserved and operating systems are emulated as a virtual machine. Only where the meaning and content of digital media and information systems are well understood is migration possible, as is the case for office documents. However, at least one organization, the Wider Net Project, has created an offline digital library, the e Granary, by reproducing materials on a 4 TB hard drive. Instead of a bit-stream environment, the digital library contains a built-in proxy server and search engine so the digital materials can be accessed using an Internet browser. Also, the materials are not preserved for the future. The e Granary is intended for use in places or situations where Internet connectivity is very slow, non-existent, unreliable, unsuitable or too expensive. But, it also poses for the risk of online hazards which could be disastrous as the physical natural calamities. Effective ways of prevention like that of maintaining a backup system are hence very much essential.

Conclusion:

Traditional libraries are limited by storage space; digital libraries have the potential to store much more information, simply because digital information requires very little physical space to contain it. As such, the cost of maintaining a digital library can be much lower than that of a traditional library. A physical library must spend large sums of money paying for staff, book maintenance, rent, and additional books. Digital libraries may reduce or, in some instances, do away with these fees.

Usage of E-Library

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MEANING OF E-LIBRARY:

E- Library also known as digital library is a special library that can include text, visual material, audio material, video material, stored as electronic media formats along with means for organising, storing and retrieving the files and media contained in the library collection. Digital libraries can vary immensely in size and scope and can be maintained by individuals, organizations, or affiliated with established physical library buildings, or institutions, or with academic institutions. The digital content may be stored locally, or accessed remotely via computer networks. An electronic library is a type of information retrieval system.

DEFINITION

Digital library are logical extensions and augmentations of physical libraries in the electronic information society. Extension amplify existing resources and services and augmentations enable new kind of human problem solving and expression.

- MARCHIONINI.

HISTORY:

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Traditional libraries are limited by storage spaces; digital libraries have the potential to store much more information, simple because digital information requires very little physical space to contain it. As such, the cost of maintaining a digital library can be much lower than that of a traditional library. A physical library must spend large sums of money paying of staff, book maintenance, rent, and additional books. Digital libraries may reduce or, in some instances, do away with these fees. Both types of library require cataloguing input to allow user to locate and retrieve material. Digital libraries may be more willing to adopt innovations in technology providing users with improvements in electronic and audio book technology as well as presenting new forms of communication such as wikis and blogs; conventional libraries may consider that providing online access to their OPAC catalog is sufficient. An important advantage to digital conversion is increased accessibility to individuals who may not be traditional patrons of a library, due to geographic patrons of a library, due to geographic location or organizational affiliation.

NO PHYSICAL BOUNDARY:

The user of a digital library need not to go to the library physically; people from all over the world can gain access to the same information, as long as an Internet connection is available.

ROUND THE CLOCK AVAILABILITY:

A major advantage of digital libraries is that people can gain access 24/7 to the information.

MULTIPLE ACCESS:

The same resources can be used simultaneously by a number of institutions and patrons. This may not be the case for copyrighted material: a library may have a license for “lending out” only one copy at a time; this is achieved with a system of digital rights management where a

resource can become inaccessible after expiration of the lending period or after the lender chooses to make it inaccessible (equivalent to returning the resource).

INFORMATION RETRIEVAL:

The user is able to use any search term (word, phrase, title, name, subject) to search the entire collection. Digital libraries can provide very user-friendly interfaces, giving click able access to its resources.

PRESERVATION AND CONSERVATION:

Digitization is not a long-term preservation solution for physical collections, but does succeed in providing access copies for materials that would otherwise fall to degradation from repeated use. Digitized collections and born-digital objects pose many preservation and conservation concerns that analog materials do not.

SPACE:

Whereas traditional libraries are limited by storage space, digital libraries have the potential to store much more informations simply because digital information requires very little physical space to contain them and media storage technologies are more affordable than ever before.

ADDED VALUE:

Certain characteristics of object, primarily the quality of images, may be improved. Digitization can enhance legibility and remove visible flaws such as stains and discoloration.

E-LEARNING:

Most of our university libraries are now automated and many scholars have e-mail accounts. Communication and data transfer or interchange has become easy with the help of Internet and email attachments. The Inflibnet (web.inflibnet.ac.in/index.jsp) program for university libraries is expanding in every dimension.

The concept of e-learning can be incorporated into a digital library system. For instance, in an e-learning environment the contents are truly dynamic. Any piece of information comes with a system that equips a user to test his level of knowledge. Libraries have adapted accordingly to enhance the learning process.

SUPPORTING ACADEMIC DISCIPLINES:

It is becoming increasingly important that librarians and faculty become colleagues in the research process. Technology is certainly a force for creating a needed climate of collaboration and partnership as both groups strive to attain the institution's educational mission. In many cases librarians themselves will be expected to possess the credential of a scholar. In technological age, a terminal degree in particular subject will increasingly be a necessary requirement for those librarians who will work closely with faculty members. It might be argued that this is unrealistic. However, it seems that more and more individuals with doctoral degrees are entering librarianship as the difficulty of obtaining faculty position shows little sign of abating.

The optimal functioning of the new networking library will require many skills and knowledge areas that presuppose many diverse type of library personnel. It is likely that many of the professional personnel working in the networked library will not possess an MLS degree. While only a minority of librarians will need to be computer experts most should be able to instruct the more technologically naive faculty member, at his or her own office workstation, in some basic computer skills. Librarians experts in the complexities of production, organization, and access to stored information, must sit down with faculty in their office, learn their research needs, and as information experts help them identify and access the best resources. Presentations on library and information issues before entire academic departments would also be beneficial. The instruction can then be far more focused and meaningful for its subject specificity.

TEACHING AND FACILITATING INFORMATION ACCESS:

As college and university libraries and their concomitant systems of networked information resource instruction become an intrinsic part of a pervasive electronic community, the librarian's traditional role, particularly that relating to teaching will be even more acute. Librarians, regarded more and more as the information specialists on campus, can help faculty develop new pedagogical services. Very often faculty are not completely up to date with the multitude of resources now available in the electronic library, especially in the plethora of CD-ROM and online databases. They find it difficult to advise students on the latest searching tools. Moreover, many are ill acquainted with appropriate material on the internet, whereas subject specialist librarians are in front of this area.

Librarians should work far more closely with faculty in advising how accessing electronic information resources can enhance their teaching. They might, help establish teaching models that are not teacher and classroom-centered and that are accessible at all times of the day and night, with video, sound, pictures, and text all playing an important part. In addition, librarians can provide professional help in creating home pages for the professor and his or her courses; in designing appropriate information resources based curricula; in placing course lectures, graphics, other media, and bibliographies on the web, where students can access them from anywhere twenty four hours a day; and devising assignments that can be completely electronically.

CONCLUSION:

In this paper, we thoroughly go through about the e-library's various advantage and its importance in the students academic excellence. Also, librarians function to help in teaching. Thus, librarian must have the skill to operate the computers. As well as, they have to update themselves about the innovation in teaching. Thus, this modern world we can access books in any time, anywhere without any obstacles.

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E-Learning- An Overview

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Lack of acquiring new, or modifying and reinforcing existing, rning is the a knowledge, behaviors, skills, values, or preferences and may involve synthesizing different types of information. The ability to learn is possessed by humans, animals, plants and some machines. Progress over time tends to follow a learning curve. It does not happen all at once, but builds upon and is shaped by previous knowledge. To that end, learning may be viewed as a process, rather than a collection of factual and procedural knowledge. Learning produces changes in the organism and the changes produced are relatively permanent.

What is e-learning?

E-learning is electronic learning, and typically this means using a computer to deliver part, or all of a course whether it's in a school, part of your mandatory business training or a full distance learning course.

In the early days it received a bad press, as many people thought bringing computers into the classroom would remove that human element that some learners need, but as time has progressed technology has developed, and now we embrace smartphones and tablets in the classroom and office, as well as using a wealth of interactive designs that makes distance learning not only engaging for the users, but valuable as a lesson delivery medium. Building partnerships with quality training providers, and combining this with a dedicated experienced technical team and support staff, Virtual College provides the perfect blended learning environment, offering anyone the chance to take their online training to the next level.

What are the benefits?

There are 5 key benefits in which elearning have transformed the landscape of learning and development. When compared to the traditional mode of classroom learning, there is clear evidence that elearning brings:

1. It's what learners want - really
2. Faster delivery
3. Lower costs
4. More effective learning
5. Lower environmental impact.

1. It's what learners want - really

The recent report from Towards Maturity on the gap between corporate learning and what learners actually want highlights that, when given a choice, learners want mobile, relevant, personalized and self-paced content at a point of need. What they get is often a little different - with too much emphasis on face-to-face and long courses. The digital revolution and smart phone boom has triggered huge changes in how we access, consume, discuss, and share content. Naturally, learning is following suit. Whilst many want learning at a point of need, many learn in evenings and at weekends and on the way to or from work. A key benefit to getting your learning online and multi-device is that it ensures you are in sync with modern learners - delivering the type of content they want, when they want it. Get learners on-side, and you're more likely to get the results you need. Plus, digital, self-paced learning can be accessed at point of need, not somewhere else - like a classroom far away - so employees can apply what they've learnt straight away. The Towards Maturity report and our Insights

report, also highlight learners' leaning towards social and collaborative learning. Technology can support and enable this, at a global scale. So, basically, digital is where it's at, all rounds.

2. Faster Delivery

At a time when change is faster than ever, a key advantage of elearning is that it has quicker delivery cycle times than traditional classroom-based instruction. Elearning cuts down on the training time required because:

- it does not take as long to start and wrap up a learning session
- learners set their own pace, rather than the pace of the group
- no travel time is needed to get to and from training events
- learners can focus on elements of a programme they need to learn and can skip what they already know

Alongside these factors, there is also a practical limitation on how quickly learning can be rolled out with classroom-based instruction, as the capacity to deliver is limited by the number of available classrooms and trainers. Our rapid elearning service on the other hand, has enabled organizations to create and roll out training programme within weeks, or even days.

3. Lower Costs

Because of the speed and ease in which elearning is delivered, the costs of learning and development for an organisation are drastically reduced. There are the immediate cost-effective gains of elearning in terms of reducing training time as well as cost-effective savings in terms of trainers, course materials, travel and accommodation. However, it is equally important to highlight that elearning, when done right, can also improve an organisation's profitability.

4. More effective Learning

- a. better attitude toward the elearning format and training in general
- b. improved scores on tests, certifications or other evaluations
- c. increase in number of learners who achieve 'mastery' level and / or 'pass' exams
- d. greater ability to apply the new knowledge or processes on the job
- e. better long-term retention of information

5. Lower Environment Impact

By providing an alternative to the paper-based learning and testing of traditional classrooms, elearning is an effective way for organisations to significantly reduce their carbon footprint.

Problems faced by students in e-learning

The most common problems faced by the students in e-learning

1. **Adaptability Struggle**
2. **Technical Issues.**
3. **Computer Literacy.**
4. **Time Management.**
5. **Self-Motivation.**

How to overcome 5 common problems**1. Adaptability****Struggle.**

Switching from traditional classroom and face to face instructor training to computer-based training in a virtual classroom makes the learning experience entirely different for students. Their resistance to change doesn't allow them to adapt to the online learning environment, whereas it takes time for them to get accustomed to Course Management Systems (CMS) and the methods of computer-based education. While passive listening and notes taking are expected in a traditional classroom, online discussions or creating a web page demand springing into action. Students with a "traditional" mindset find it difficult to adapt; however, they need to accept the new learning circumstances with an open mind and heart. Understanding the benefits of eLearning and even discussing them with their peers may change this mindset and better prepare students for online classes.

2. Technical Issues.

Many students are not provided with the high bandwidth or the strong internet connection that online courses require, and thus fail to catch up with their virtual classmates. Their weak monitors make it hard to follow the Course Management System and their learning experience becomes problematic. Moreover, most of them live off campus and find it difficult to keep in tune with the technical requirements of the chosen course. Some of them don't even own computers and seek help in Learning Resource Centers for technical assistance. The only solution to this problem knows exactly what kind of technological support they will need for a certain course before enrolling in it, as well as properly equipping themselves for the course's successful completion.

3. Computer Literacy.

Although students are generally tech savvy and thus able to manage computers well, lack of computer literacy is a major issue among students today. Many of them cannot operate basic programs such as Microsoft Word and PowerPoint and therefore are not able to handle their files. Furthermore, many students find fixing basic computer problems troublesome, as they have no knowledge in this area. However, technological proficiency is a must for following online courses, as it enables students to manage their assignments and courseware in an organized manner without struggling. Basic courses in computer literacy enhance students' knowledge in the field; having a fundamental knowledge of computer hardware would help them participate in online classes without interruptions and hindrances.

4. Time Management.

Time management is a difficult task for e-learners, as online courses require a lot of time and intensive work. Furthermore, whereas it is mostly adults who prefer web-based learning programs for their place and time flexibility, they rarely have the time to take the courses due to their various everyday commitments. A regular schedule planner would be a significant help to these learners, as they could even set reminders for their courses and assignments.

5. Self-Motivation.

Self-motivation is an eLearning essential requirement; however, many online learners lack it, much to their surprise. After enrolling in distance learning courses, many learners fall behind and nurture the idea of giving up, as difficulties in handling a technological medium also seem insurmountable. Students need to find the motivation to follow the new educational trends and also properly equip themselves for future challenges in their education and careers. Only a positive attitude will help them overcome the challenges in eLearning; though this is hard to practice, students need to understand that it is necessary in order to reap the e-learning's benefits in the future.

Advantages of e-learning

- 1. Flexible.**
- 2. Cost Effective**
- 3. Train an unlimited number of learners, simultaneously**
- 4. Automatic marking and reporting**
- 5. The learner is in control**
- 6. Consistency**

7. Easy to update.
8. Learners are responsible for their own education
9. Improved computer skills

Disadvantages of eLearning

1. Motivation can be a problem
2. Lack of face-to-face interaction
3. Access to technology

Scope of e-learning

In one phase e-learning is used coeducational purpose and at other level it is been used for training. The educational; use is limited to secondary and higher secondary level. In the second phase it is used to provide training to the employees and to upgrade their skills. E-learning is growing at very low rate in India as compared to international market where it is been used at all level. In India if we can be able to make e-learning as a source of learning in rural areas then it is the easiest and fastest tool to educate people. If we consider the population in India it is hard to accommodate all the people in specific university or educational area to get the educations. The growth rate of selfpaced e-Learning by country is: 1. India: 55%, 2. China: 52%, 3. Malaysia: 41%, 4. Romania: 38%, 5. Poland: 28% 6. Czech Republic: 27%, 7. Brazil: 26%, 8. Indonesia: 25%, 9. Colombia: 20%, 10. Ukraine: 20%.

Challenges in e-learning in India

In case of India majority of population is leaving in rural areas so it is bit difficult to make them aware about the concept of e-learning. The second problem is to make it available to the rural areas. The problem of infrastructure, connectivity and internet availability are also there. The life style of people also affect for all this. We can take these measures to implement the concept of e-learning in rural area where we will be having full utilizations of the system. The social implication of e-learning can be very important issue to be considered for the success of e-learning in India. The social implication consists of religion, gender, literacy, geographical area, literacy, lifestyle etc. If we consider cultural issues the following factors matters which includes content, style of writing , material used and style of utilization. Some contents may be favorable or unfavorable to the to some group of people, so we need to take care of this. Future of e-learning in India E-learning has a major role to play in India to grow up in all aspects in international market. As India is one of the leading IT service provider countries. The presence of world class IT infrastructure and IT professionals enable it to be one of the leading e- learning service providers in India. The government is taking proactive measures IT regulatory and financial capacity to boost the e-learning environment in India. Already lots of funds are being invested in setting up internet kiosks In rural areas for the purpose of communication which can be used for e-learning purpose.

Conclusion

In the development of e- learning in India, it helps to grow in our organizations. In anticipation of this growth, the governments, business companies and professional associations can start focusing on applications and the effective and efficient implementation of e-learning. By recognizing that e-learning truly is a methodology, one can experience the greatest benefits that e-learning has to offer now and in the future. In the end, the fact remains that, with respect to e-learning, poor quality procurement practices (in all sectors but especially in the public sector) are a barrier to growth and adoption. So it is necessary to make a thorough evaluation when it comes to choose e-learning software for education in order to improve the knowledge of learners, the learning outcomes, the performance outcomes, and the business and policy impact and in order to value the money spent.

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Web world wide.

மலரும் சமுதாயத்தில் கல்வி

த.ஜீவராணி
முனைவர் பட்டஆய்வாளர்,
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முன்னுரை :-

எந்தஒருசமுதாயத்திலும்,காலத்திற்கேற்றவாரும் பலதேவைகளைக் கருத்தில் கொண்டும் எழுதுவதும்,அவற்றினைநிறைவுசெய்யும் வகையில் மாற்றங்கள் அச்சமுதாயஅமைப்பிலும்,செயற்பாடுகளிலும் நிகழ்வதும் இயற்கையானநிகழ்ச்சியேஎனினும் அதுமிகையாகாது.

இந்தியாவில் தற்பொழுதுஅதிவேகமாகபலவிதங்களில் சமூகமாற்றங்கள் ஏற்பட்டுவருகின்றன.

பழங்கால இந்தியாவில் கல்வி:-

பழங்கால இந்தியாவில் கல்வியானதுதனிமனிதனின் வளர்ச்சியைஅடிப்படையாகக் கொண்டேசெயல்பட்டது. ஆனால் கல்விமிகஆழமானதநம்பிக்கையின் அடிப்படையில் இருந்தது. வேதங்கள் உபநிடதங்கள்,புராணங்கள் போன்றவற்றைபோதிப்பதிலும் அவற்றின் அடிப்படையிலும் கல்வி இருந்தது. அறிவினைப் பெறதலானதுமதத் தொடர்பானக் கருத்துகளையேமையமாகக் கொண்டிருந்தன.

பிறகுகாலப்போக்கில் சமூகவாழ்க்கையில் சாதிஅடிப்படைஉருவானது. வர்ணாஸ்ரமதர்மம் என்றுஅழைக்கப்பட்டுசமுதாயத்தின் குறிப்பிட்டபகுதியினர் குறிப்பிட்டத் தொழில்களைசெய்யவேண்டும் என்றஅடிப்படைவகுக்கப்பட்டது.சமூகத்தில் ஏற்றத்தாழ்வுகள்,உயர்ந்தவர்,தாழ்ந்தவர் என்றபாகுபாடுஏற்படவழிவகுத்தது.

இடைக்காலத்தில் கல்வி:-

முகம்மதியரின் படையெடுப்புக்குப் பின் இந்தியக் கல்விமுறையில் மாற்றங்கள் ஏற்பட்டன. “பன்னிரெண்டாம் நூற்றாண்டின் இறுதியில் முகம்மதுகோரியின் ஆட்சிக் காலத்தில் மகுதிகளையும் அதனையொட்டிகல்விநிலையங்களையும் அமைத்து ‘குர்ஆன்’ படிப்பதற்கும்

இசுலாமியமதவளர்ச்சிபண்பாட்டுவளர்ச்சிகளுக்காகவும் கல்வியானதுகற்றுக் கொடுக்கப்பட்டது. பதின் மூன்றாம்,பதினான்காம் நூற்றாண்டுகளில் கில்ஜி வம்சத்தினர் முகம்மதியர்களோடு இந்துக்களுக்கும் கல்விக் கொடுக்கும் ஏற்பாட்டினைத் தொடங்கினார். பாபர், ஹீமாயூன் காலத்திலும் அக்பரின் காலத்திலும் முறையானக் கல்விக் கொடுப்பதற்கானநிலையங்கள் உருவாயின.”¹மதபோதனைகள் மட்டுமின்றிமற்றப் பாடங்களும் பயிற்றுவிக்கப்பட்டன.

ஆங்கிலஆட்சியில் கல்வி:-

தொடக்கத்தில் கல்விபற்றிஅலட்சியபோக்கே இருந்தது. பின்னர் ஆங்கிலக் கல்விமுறையின் அடிப்படையில் ஒருகல்விமுறைவகுக்கப்பட்டது. ஆங்கிலேயஆட்சியில் அவர்களுடையஆட்சிநிலைக்கஅன்றாடஅலுவல்களைக் கவனிக்கத் தேவையானப் பணியாளர்களை உருவாக்க ஒரு கல்வி முறை வகுக்கப்பட்டது. மெக்காலேயின் கல்வித் திட்டம்,சர்.சார்லஸ் உட் என்பவரின் கல்விக் பற்றிய அறிக்கை குறிப்பிடத் தக்கவை. பொதுவில் தேசியக் கல்விமுறையானதுவகுக்கப்படவில்லைஎன்பதுகுறிப்பிடத்தக்கது.

விடுதலைக்குப் பிறகு கல்வி:-

விடுதலைக்குப் பிறகு இந்தியாவின் கல்விமுறைப் பற்றிப் பார்ப்பதற்குமுன் சமுதாயத்தின் உண்மைநிலையைப் பற்றித் தெரிந்து கொள்ள வேண்டியது அவசியமானதாகும்.

“ஆங்கிலஆட்சிக் காலத்தில் 1920-ஆம் ஆண்டுஆரம்பக் கல்விச் சட்டம் கொண்டுவரப்பட்டது. 1950-ம் ஆண்டுநம் நாடு குடியரசு நாடாக அறிவிக்கப்பட்டு அரசியல் சட்டமானது செயற்படுத்தப்பட்டது. அதன் 45-வது பிரிவின் படிபதினான் குவயதுவரை அனைத்துக் குழந்தைகளுக்கும் கட்டாய இலவசக் கல்விக் கொடுக்கப்படவேண்டும் என்றுவரையறுக்கப்பட்டது. ஆனால், இன்றும் இது நிறைவேற்றப்படாத ஒன்றாகவே இருக்கிறதுநாட்டில் எழுதப்படிக்கத் தெரியாதவர்களின் எண்ணிக்கையானது 64 சதவிகிதம், கேரளா, தமிழ்நாடு, மகாராஷ்டிரம் போன்றமாநிலங்களில் எழுதப்படிக்கத் தெரிந்தவர்களின் எண்ணிக்கை 73.45 விழுக்காடுஎழுதப்படிக்கத் தெரியாதமக்கள் பெருமளவில் உள்ளகாரணத்தால் தேசிய முன்னேற்றமானது பாதிக்கப்படுகிறது.”

²ஏழ்மைநிலைக்கும் படிப்பானது ஒரு பெரிய காரணமாக இருக்கலாம். ஆனால் வறுமைக் கோட்டுக்குக் கீழ்ள்ளமக்களின் எண்ணிக்கைபாதிக்கும் மேல்

உள்ளதாகப் புள்ளிவிவரங்கள் கூறுகின்றன. விடுதலைக்குப் பின் 60 ஆண்டுகள் முடிந்ததும் முன்னேற்றத்திற்குத் தடையாக உள்ளன எனலாம் இதுவே இந்திய சமுதாயத்தில் உள்ள முடநம்பிக்கைகளும் முன்னேற்றத்திற்கும் தடையாக உள்ளன.

சுதந்திர இந்தியாவின் கல்விபணி:-

[Education task of independent Indian]

சுதந்திர இந்தியாவானது இந்திய அரசியல் சட்டத்தின் கீழ் [1950] 14 வயதுக்குட்பட்ட சிறுவர் சிறுமியர் அனைவருக்கும் கல்விகற்றே ஆக வேண்டும் என்று வலியுறுத்தப்பட்டது. 1964 – 66-ல் வெளியிட்ட கல்விகுழு அறிக்கையில் அரசியல் சட்டத்தின் நெறிமுறைக் கோட்பாட்டின் [Directive Principle]படி இலவசமாகக் கட்டாயக் கல்வி அனைவருக்கும் கொடுக்கவேண்டும் என்று முடிவெடுத்தது.³ இதன்படி அனைவரும் கல்விகற்றல், பள்ளியில் சேர்தல், பள்ளியில் தங்கிக் கல்விகற்றல் போன்றவை பின்பற்றப்பட்டன. பின் 1975-76-க்குள் அனைத்துக் குழந்தைகளுக்கும் ஐந்தாண்டுக் கல்வி அளித்தாகவேண்டும் என்றும் எந்தநிலையிலும், தேக்கம், கழிவு ஆகியவற்றிற்கு இடம் கொடுக்கக் கூடாது எனவும் தீர்மானிக்கப்பட்டது. அதன்படி ஏழாம் வகுப்பு தேறினவர்களுக்கு தொழில் மையக் கல்வி கொடுக்க வேண்டும் என்றும் எதிர்கால கல்வி திட்டத்தை மாநிலமற்றும் மாவட்ட அளவில் உருவாக்கவேண்டும் எனவும் வலியுறுத்தியது. மேலும் கல்விகுழுவின் நோக்கம் 14 வயதுக்குட்பட்ட அனைத்து மாணவர்களுக்கும் எழுத்தறிவு கற்பிக்கவேண்டும், பகுதிநேர கல்வி, (Part time Education) முறைசாராக் கல்வி (Non Formal Education) மூலம் 15 வயதுக்கு மேற்பட்டவர்களுக்கு கல்வியை கற்றுத்தரவேண்டும் என்றும் இது கூறுகிறது. இப்படியாக நாடு சுதந்திரம் அடைந்தபின் கல்வித்துறையில் பெரும் முன்னேற்றம் எழுந்துள்ளது என்பதை மறுக்க முடியாது.

தேசிய கல்வியின் சிறப்பு அம்சங்கள்:-

கல்வியில் நல்ல முன்னேற்றம் “யாவர்கும் கல்வி” என்ற இலக்கையும் அடையவேண்டுமானால் ஆசிரியர்களின் ஒத்துழைப்பு மிகவும் அவசியம் ஆகும். எனவே ஆசிரியர்களுக்கு (Student Teacher's) சிறந்த முறையில் பயிற்சி அளிக்க வேண்டும். 20 ஆண்டுகளில் பலபுதிய கற்றல் தேவைகள் எழுந்துள்ளன.

காலத்திற்கு ஏற்றாற் போல் சமுதாயவளர்ச்சி,புதியஅறிவியல் தொழில் நுட்பக் கண்டுப்பிடிப்புகள் ஆகியவற்றால் கல்வியும் மாறுதலடைந்து நவீனமடையவேண்டும். புதியஅறிவுத்திறன்களும் அனுகுமறையும் தேவைப்படுகிறது இத்தகைய பண்புகளைப் பெறுவதற்குமுற்றிலும் புதியகல்விமுறை தேவை என்பதைஉணர்ந்து 1986-ல் புதியகல்விக் கொள்கை[New Education Policy]வெளியிடப்பட்டது. இத்திட்டத்தின் சிறப்புஅம்சம் செயல் முறையில் கல்வியைவலியுறுத்துவதுஅவசியமாகும். இந்த இயக்கத்திற்குபல்கலைக்கழகங்கள். அரசுஅலுவலர்கள்,பணிமுப்புப் கல்வியாளர்கள் படித்தபெண்கள்,ஆகியஅனைத்துதரப்பினரின் பங்களிப்பும், ஆசிரியரின் பங்களிப்பும், தேவைப்படுகிறது. இதற்குகல்விகற்றோர் அனைவரும் ஆசிரியப்பணிசெய்துகல்விக்குசிறப்பினைஅளிப்பதுமிகவும் சாலச் சிறந்தது. இதன்படிபல்வேறுபுகழ்வாய்ந்தகல்வியாளர்களும் ஆசிரியர் குழுவும் நூலகமும் தேசியமற்றும் சர்வதேசஅளவிலானபுத்தகங்கள் பத்திரிக்கைகள் போன்றவை கல்விவளர்ச்சிக்கும் கல்வியில் ஆய்வைமேற்கொள்ளுவதற்கும் பயனுள்ளவையாகஉள்ளன. எப்படியெனில் ஒருகிணைந்தM.Philமற்றும் Ph.Dஉயர்கல்வியை முழுநேரப்படிப்பாகப் கற்கவாய்ப்பு தரப்பட்டுள்ளது. இது முழுநேரம் மட்டும் அன்றுபகுதிநேரமாகவும் கற்கவாய்ப்புதரப்பட்டுள்ளது. தேசியமற்றும் உலகளாவியபொருள்களைஉள்ளடக்கியஏட்டுரைப்பகுதியில் முன் மாதிரியானகற்பித்தல்முறை,ஆய்வுமற்றும் கட்டமைப்பின் மூலம் தீர்மானிக்கக் கூடியதிட்டங்கள் மற்றும் மேற்பார்வைமுறைகள் போன்றன இதன் சிறப்புஅம்சமாகும்.

கல்வியின் இலக்குகள்:- (இலட்சியம்)

புதியபகுதலும் பழையனகழிதலும் என்ற கூற்றுப்படி கல்வியில் புதியகற்பித்தல் பொருள்களைபயன்படுத்தி(Use of Learning Materials)கற்றலை மேம்படுத்துவதுமற்றும் மாணவர்களின் உடல்,மனம் மேம்படஉடற்பயிற்சி கல்விஅளித்தல் மேலும் கற்பித்தல் பலபுதுமைகளைபுகுத்திசெயல்படுவதுமட்டும் இன்றி சுய கற்றலுக்கானகற்றல் மேம்படுத்தவும் தகவல் தொடர்புசாதனம்,கணினி, புரஜெக்டர்,போன்றபல்வேறுபுதியயுக்திகள் ஒலமாகவும்கல்வியைவளர்ச்சியஅசையசெய்வது இதன் நோக்கமாகும். கல்வியில் திட்டமிட்டயுக்திகள்,நிர்வாகமுறைகளைகையாண்டுகல்விதரத்தைஉயர்த்தவேண்டும் . கல்விதிட்டம் மற்றும் தன்னார்வத் தொண்டுநிறுவனங்களுக்கும் கல்விபணிமற்றும் தொழில் சம்பந்தமாகவழிகாட்டுதலைநல்குதல். “கல்வித்திட்டத்தில் (Ph.D ,M.Phill,Post-Doctoral. Programmes)அனைத்துக் கல்விப் பிரிவுகளுக்கும் ஊக்குவிக்கும் வண்ணமாகபரிசுகளையும் ,உதவிதொகைகளையும் ஏற்பாடுசெய்தல் பயிற்சிகொடுத்தல் (Training),மாநாடுகள் (Conferences),பணிச் செயல்பாடுகள் (Workshops),சந்திப்புகள் (Meetings),கருத்தரங்குள் (Seminars) போன்றவற்றை மத்திய, மாநில மற்றும் யூனியன் பிரதேசங்களில் ஏற்பாடுசெய்தல்.

ஆசிரியர் கல்வியாளர்களுக்கு(Teachers' Educations) பயிற்சி பெறுவதற்கான நிகழ்ச்சிகளை(Training Programmes) ஏற்பாடுசெய்தல். குறிப்பிட்ட இலக்குகளைஅடையபல்கலைக் கழகங்கள் (Universities)பல்கலைக்கழகமானியக் குழு (University Grants Commission) இந்தியாமற்றும் வெளிநாடுகளில் உள்ளநிர்வாகம் மற்றும் செயலாட்சிநிறுவனங்கள் (Institutes ofManagement and administration) ஆகியஅனைத்துநிறுவனங்களுடன் இணைத்துசெயலாற்றுவதல்

“எப்பொருள் யார் யார் வாய்க் கேட்பினும் அப்பொருள்

என்பதுபோலஎங்கேநன்மைகள் இருக்கின்றனவோ அவற்றைஎடுத்துக்கையாளத் தெரிவதான் அறிவுடைமையாகும். இந்தவகையில் இன்றையஅறிவியல் நவீனஉலகிற்கு ஏற்ப எல்லாவகையிலும் புதுமைகள் புகுத்திசெயல்பட்டால்கல்வியில் முன்னேற்றம் அடையவழிவகுக்கும். கல்வியில் கற்றலுக்கும்,கற்பித்தலுக்கும் இடையேபலபுதியமுறைகளைக் கையாளுவதன் மூலம் கல்வி வளர்ச்சியடையவழிவகுக்கிறது. அன்றையகாலகல்வியில் இருந்து இன்றையகாலகல்விமுறைவரைபடிப்படியானவளர்ச்சியைநாம் கண்கூடாககாணமுடிகிறது.

1. ஆசிரியர் கல்வ	1	-	உமாமகேஸ்வரி
ஜீ.வி.பப்ளிகேஷன்			
2. கலைதிட்டவளர்ச்சி		-	உமாமகேஸ்வரி
ஜீ.வி.பப்ளிகேஷன்			
3. கற்பித்தல் நுட்பவியல்		-	அ.மீனாட்சிசுந்தரம்
காவ்யமாலாபப்ளிகேஷன்			
4. கல்வியில் தத்துவமும் சமுதாயமும்		-	அ.மீனாட்சிசுந்தரம்
காவ்யமாலாபப்ளிகேஷன்			

கற்பித்தலும் கற்றலும்

சா.பாரதி

இளநிலை ஆய்வாளர், வெ.ப.சு.தமிழியல் ஆய்வுமையம், ம.தி.தா.இந்துக் கல்லூரி

முன்னுரை

கற்பித்தல் என்பது ஆசிரியர்களுக்கு நவீன காலத்தில் மாணவர்களுக்கு கல்வியறிவு புகட்டுவது மட்டும் ஆகாது. மாணவர்களின் தேவைகளையும், பிரச்சனைகளையும் அறிந்து அதற்கேற்ப அவர்களை அவர் வழிநடத்த வேண்டியது அவசியமாகிறது. ஆசிரியர் மாணவர்களின் வழிகாட்டியாகவும் ஆலோசகராகவும் செயல்பட வேண்டியது காலத்தின் கட்டாயமாகிறது.

கல்வி

கல்வி ஒருவரைத் தற்சார்புடையவராகவும், சுயநலம் இல்லாப் பொதுநல நோக்குடையவராகவும் ஆக்குவதே கல்வி (ரிக்வேதம்)¹ ஒரு நாட்டின் எதிர்காலம் அந்நாட்டின் நடைமுறையில் உள்ள கல்வி அமைப்புமுறையில் தான் அடங்கியுள்ளது என்பது அசைக்க முடியாத உண்மையாகும்.

பள்ளிக்கல்வி

இந்திய விடுதலைக்கு முன்பே, அனைவருக்கும் கல்வி வழங்க வேண்டும் என்று குரல்கள் எழுந்து வந்தாலும் கூட, இந்திய விடுதலைக்குப் பிறகு 60 ஆண்டுகளுக்கு பிறகுதான் இதற்கான சட்டம் நமக்கு சாத்தியமாகியுள்ளது. 2009 ஆம் தொடங்கி 2010 ஆம் ஆண்டு நடைமுறைக்கு வந்துள்ளது. அரசியலமைப்புச் சட்டத்தின் 21(ஏ) பிரிவின்கீழ் கொண்டு வரப்பட்ட இச்சட்டத்தின் படி தனியார் பள்ளிகளில் அந்தப் பகுதியில் வசிக்கும் ஏழைக் குழந்தைகளுக்கு 25% இட ஒதுக்கீடு செய்ய வேண்டும் என்பது விதி.

“ஏழை, பணக்காரர் என்ற அடிப்படையில் பள்ளிகள் அமைந்துள்ளதை மாற்றி, பள்ளிக் கல்வி என்பது சாதி, சமய சமுதாய, பொருளாதார அடிப்படையில் கல்வியில் வேறுபாடு காட்டாமல் பொதுப்பள்ளிகளை ஏற்படுத்த வேண்டும்”² என்று 1964 ஆம் ஆண்டே கோத்தாரிக் கமிட்டி அறிக்கையில் பரிந்துரைக்கப்பட்டாலும் கூட, அந்தப் பாதையில் நாம் இன்னமும் அடி எடுத்து வைக்காமல்தான் இருக்கிறோம். அனைவருக்கும் தரமான கல்வி என்பதன் பொறுப்பு அரசுக்குரியது மட்டுமன்று பள்ளி நிர்வாகங்கள், ஆசிரியர்கள், மக்கள் என அனைத்து தரப்பினரும் இணைந்து செயல்பட வேண்டியது அவசியமாகிறது. இது ஊர் கூடி தோர் இழுக்கும் பணியாகும்.

கற்றல் என்பது

மனிதன் பிறந்தது முதல் இறக்கும்வரை கற்றுக்கொண்டே இருக்கிறான். கற்றல் என்பது எதைக் கற்றுக் கொள்கிறோமோ அதைப் பற்றிய விவரங்களை அறிந்து கொள்ளுதல் எனலாம்.

கற்க-நிற்க என்னும் சொற்களின் அமைப்பையும், உயிருள்ளவற்றிற்கும் உயிரற்றவற்றிற்கும் இடையே உள்ள வேறுபாட்டையும் குழந்தைகள் கற்றுக் கொள்கின்றனர். முனைவனின் கற்றல் பள்ளிக்கு வெளியேயும் நடைபெறுகிறது. எனவே செய்தித்தாள்கள், வானொலி, தொலைக்காட்சி, கணினி ஆகியவை மாணவனின் கற்றலில் முக்கியத்துவம் பெறுகிறது. மாணவர்களின் கற்றலில் தொழில் நுட்பம் முக்கிய பங்கு வகிக்கிறது. பள்ளி பலவிதமான சமூகப் பொருளாதாரப் பின்னணியுடைய மாணவர்களைச் சேர்க்கும் போது அவர்களிடையே நடைபெறும் கலந்துரையாடல் மூலம் கற்றல் மேலும் செழுமையடைகிறது.

கற்பித்தலில் ஆசிரியரின் பங்களிப்பு

ஓர் ஆசிரியருக்கு முன்பயிற்சி, பணியிடைப் பயிற்சி, வகுப்பறை மேலாண்மை, கற்பித்தல் திறன்கள், தொழிற் புலமை, நாட்டம், ஆளுமை பண்புகள், தலைமையேற்புப் பாணி, கற்பித்தல் முறைகள் மற்றும் யுத்திகள் போன்றவை மிகமுக்கியமானவையாகும். ஆசிரியர் மாணவர்களைப் புரிந்து கொள்வது மட்டுமல்லாமல் அவர் தன்னையும் புரிந்துகொண்டு கற்றலின் சூழ்நிலையை தீர்மானிக்க வேண்டும். “மாணவர்கள் அனைவரும் கடவுளின் குழந்தைகள் - குழந்தைகளின் தனியாள் வேறுபாடுகளை மனதில் கொண்டு அவர்களுக்குக்கேற்ற வழியில் முன்னேறச் செய்வதே ஆசிரியர்களின் தலையாய பணியாகும்”³³ (விவேகானந்தர்). “கல்வி என்பது கடந்த காலத்தையொட்டியதாக அமையாமல், நிகழ்காலத் தேவைகளை நிறைவு செய்ய வேண்டும். அத்துடன், எதிர்காலத் தேவைகளுக்கு நம்மை தயார்படுத்தும் வகையிலும் கல்வி அமைய வேண்டும்”³⁴ (அரவிந்தர்).

மாணவர்கள் தன்கய சுதந்திரப் போக்கிற்கும் சமுதாய் எதிர்பார்ப்புகளுக்கும் இடையே நிகழும் போராட்டத்தில் சிக்குண்டு விடுகிறான். இது அவனது கற்றல் சூழலை வெகுவாக பாதிக்கின்றது. எனவே மாணவனின் சிந்தனைகளையும், மனத்தையும் அவை சிக்கிக் கொள்ளும் தளைகளிலிருந்து விடுபடச் செய்வதில் ஆசிரியர் முக்கியப் பங்கு மிக முக்கியமானதாகிறது எனலாம். ஆசிரியர் கற்பித்தல் முறையைத் தேர்ந்தெடுத்துச் செயல்படுவாரேயானால், வகுப்பறை கற்றல் - கற்பித்தல் மேம்பாடு அடையும்.

மாணவர்களின் சமச்சீர் ஆளுமை வளர்ச்சியை மேம்படுத்தவும், அவர்கள் பிரச்சனைகளை கண்டு விலகாமல் தைரியமாக எதிர்கொள்ளும் திறனையும் வளர்க்கவும் ஆசிரியரின் வழிகாட்டுதல் மிக முக்கியமாகிறது. மாணவர்களின் மன உணர்வுகளுக்கு பெற்றோரும், ஆசிரியரும் செவிசாய்க்கும் பட்சத்தில் அவர்களின் கல்வி உச்சத்தை எட்ட முடிகிறது.

கல்வியும் உலகமயமாதலும்

மாறிவரும் உலகப் பொருளாதாரச் சூழ்நிலையில் எந்தவொரு நாடும் தனித்து ஒரு தீவாக இருக்க முடியாது. மற்ற நாடுகளுடன் சார்ந்தும், இணைந்தும் சென்றால்தான் வேகமான பொருளாதார வளர்ச்சியை அடையமுடியும். வளரும் நாடுகளில் பொருளாதாரச் சீர்திருத்தங்கள் அமல்படுத்தப்பட்டு வருகின்றன. இதற்கு மறுகட்டமைப்புத் திட்டங்கள் (Structural Adjustment Programme) வகுக்கின்றன. பொருளாதார உலகமயமாதலின் நேரடி விளைவாகவே கல்வியில் உலகமயமாதல் அமைந்துள்ளது.

உலகமயமாதலினால் நாடு சீர்குலையும் என சிலரால் விமர்சிக்கப்பட்டாலும் உலகமயமாதல் இந்தியக் கல்வியில் பெரும் தாக்கத்தை ஏற்படுத்தியுள்ளது என்பதை மறுப்பதற்கில்லை. இதில் மாணவர்கள் மாற்றங்களுடன் வருங்கால உலகைத் தோற்றுவிப்பதற்கான வழிமுறைகளைக் கற்றுத்தருகிறது. அயல்நாட்டுப் பல்கலைக்கழகங்களின் படிப்புகளுக்கு இணையாக நம்நாட்டுப் பல்கலைக்கழகப் படிப்புகள் மாறிவருகின்றன.

காட் (CATT) என்னும் புதிய பொருளாதாரச் கொள்கை உலகமயமாதலின் வெளிப்பாடாகும்.

கல்வி: உலகமயமாதலின் பயன்பாடு

1. தகுதி வாய்ந்த மனிதசக்தியை உருவாக்க முடியும்.
2. இந்தியப் பட்டப்படிப்புகள் நாடுகடந்த அங்கீகாரத்தைப் பெறமுடியும்
3. துறை நிலைமை மேம்பட வேண்டும்.
4. கட்டமைப்பு வசதிகள் உயரும்.
5. கல்விக்கு மதிப்பு சேரும்.

கல்விக்கொள்கையின் இன்றைய நிலைப்பாடு

இன்றையக் கல்விக் கொள்கையானது அனைவரிடமும் அதிர்ப்தியை அளிக்கிறது. மேலும் அரசுப் பள்ளிகளில் பெரும்பான்மையான மாணவர்களின் நலனையும் காக்க வேண்டியது அவசியமாகிறது. பெரும்பாலான அரசுப் பள்ளிகளில் போதிய ஆசிரியர்கள்

இல்லை. போதிய கட்டமைப்பு வசதிகளும் இல்லை. இதனாலே பள்ளியில் சேர்ந்த மாணவர்கள் படிப்பை இடையிலே விடுவது பெருகுகிறது.

கல்விச் சிக்கல்களுக்கான தீர்வுகள்

தமிழகத்தில் பள்ளிகளில் பயிலும் மாணவ, மாணவியருக்குச் சுற்றுச்சூழல் சூழல், குடும்பச் சூழ்நிலை காரணமாக ஏற்படும் மாற்றங்கள். குறிப்பாக வளர் இளம் பருவத்தில் ஏற்படும் மாற்றங்களால் மனக் கலக்கம், மனச் சோர்வு, மனஅழுத்தம், மனக் குழப்பம் போன்ற பிரச்சனைகளைத் தீர்ப்பதற்காக உளவியல் ஆலோசனை வழங்க வேண்டும்.

பல மாணவர்களுக்கு எட்டாக் கனியாக உள்ள கருத்தரங்குகள், விரிவுரைகள் மற்றும் கல்வி தொடர்பான நிகழ்ச்சிகள் அனைத்தும் அரசு தொலைக்காட்சி மூலம் வழங்கினால் மாணவர்கள் பயன்பெற வாய்ப்புள்ளது. மேலும் கல்வியைத் தாண்டி கலைப் பயிற்சிகள் கட்டாயமாக தேவையாகிறது.

முடிவுரை

கற்றலும் சரி, கற்பித்தலும் சரி மாணவர்களின் பிற்கால வாழ்க்கைக்குப் பயனுடையதாக அமைய வேண்டும். தொழிற்புலக் கல்வி காலத்தின் கட்டயமாகிறது. கற்றல் அறிவு சார்ந்து அமைய வேண்டும். தாய் மொழி வழிக்கல்வி தேவையாயினும் பிறமொழி அறிவு இன்றைய போட்டி நிறைந்த உலகிற்கு அவசியமாகும். எனவே கல்வி பாடத்திட்டத்தில் மாற்றங்கள் கொண்டு வர வேண்டும். அதுவே இனி வரும் காலத்திற்கு அவசியமானதாகும்.

குறிப்புகள்

1. மீனாட்சி சுந்தரம் முற்போக்கு கல்வி உளவியல்,
2. நாகராஜன் கல்வி உளவியல்,
3. மீனாட்சி சுந்தரம், மு.க.நா
4. மேலது,

மின்னணுவழி கற்பித்தலில் உயர்கல்வி

இரா.அன்னபூரணி

இளநிலை ஆய்வாளர், வெ.ப.சு.தமிழியல் ஆய்வுமையம், ம.தி.தா.இந்துக் கல்லூரி

முன்னுரை

“காசி நகர்ப் புலவர் பேசும் உரைதான்

காஞ்சியில் கேட்பதற் கோர் கருவி செய்வோம்”

என்றார் பாரதி.

இன்றைய நவீன உலகில் தகவல் தொடர்பு நுட்பத்தின் உதவியால் பல்வேறு சாதனைகளை மனிதன் படைத்து வருகிறான். உலகம் அவன் உள்ளங்கையில் சுழல்கிறது. இணையம், மின்அஞ்சல், முகநூல், டூவிட்டர் உள்ளிட்ட சமூக ஊடகங்கள் மட்டுமல்லாது வாட்ஸ் அப் டெலிகிராம் ஸ்கைப் வையர் போன்ற பயன்பாட்டு மென் பொருட்களையும் சிறப்பாகச் கையாளப்பட்டு வருகின்றன.

திறந்த கல்வி சார் வளங்கள் அறிமுகம்

திறந்த கல்வி சார் வளங்கள் என்ற பதமானது 2002ல் யுனஸ்கோவினால் கூறப்பட்டது. இவற்றின் நோக்கம் கற்றல் கற்பித்தலுக்குத் தேவையான கருவிகள் பாடக்கருத்துக்கள், பல்லுடகத் தொகுப்புகள் ஆகியவை உலகிலுள்ள அனைவரும் பயன்படுத்தப் பெற வேண்டும் என்பதாகும்.

இவை அனைவரும் சுதந்திரமாக பயன்படுத்தக்கூடிய மென்பொருள் தொகுப்புகளாகும். இது ஆராய்ச்சி நோக்கங்களுக்காவும் அவற்றை மதிப்பீடு செய்வதற்கும் பெருமளவில் பயன்படுகிறது. உதாரணமாக ERIC, Sodhganga போன்ற இணையதளங்களைக் கூறலாம்.

முறையான கல்வி மற்றும் முறைசாரா கல்வி பயிலும் மாணவர்களுக்கு இது மிகவும் பயனுள்ளதாக அமைகிறது.

கல்வியில் உலகமயமாக்கலை ஏற்படுத்த முக்கியப் பங்காற்றுகிறது.

நல்லக்கற்றல், கற்பித்தல் துணைக்கருவிகள் தேடிக்கண்டறிந்து பயன்படுத்த வழிவகுக்கிறது.

ஆராய்ச்சி நோக்கிலும் இது பயன்படுத்தப்படுவதால் இவை கல்வியில் பெறும் பங்கு அளிக்கின்றன.

மின் கற்றல் : (E – Learning Resource)

E- Learning Open Educational - Resources)

கற்றலில் பல்வேறு வழிமுறைகள் உள்ளன.

தானே கற்றல் செயல்வழிக்கற்றல், முயன்று தவறிக்கற்றல் உட்காட்சி வழிக்கற்றல் போன்றவை உளவியலாளர்களால் பல ஆண்டுகளாக கூறப்பட்டு வந்துள்ளன. இருப்பினும் தகவல் தொடர்பு நுட்ப வளர்ச்சிக்குப் பிறகு கணினியையும் இணையத்தையும் பயன்படுத்தி கற்றல் கல்வியில் ஒரு புதிய பரிமாணத்தை ஏற்படுத்தியுள்ளது.

மின் கற்றலின் மூலமாக மாணவர்களின் ஆக்கத்திறன், சிந்திக்கும் திறன், படைப்பாற்றல் நேரமேலாண்மை ஆகியவற்றை வளர்க்க முடியும்

தன்னுடைய இயல்பான வேகத்தில் சுதந்திரமாக நிதானமாக கற்க இயலும்.

தன்னுடைய அறிவின் தேடலுக்கு தேவையான அறிவை தேடிப்பெறமுடியும்

உயர்கல்வி கற்பவர்களுக்கு மின்னியல் கற்றல் முறையானது பெரிதும் துணை புரிகின்றது.

ICT தகவல் தொழில்நுட்பம் வழி கற்பித்தல்

கணினி தோன்றிய காலத்திலிருந்து படிப்படியாக வளர்ச்சி அடைந்து இன்று அனைவராலும் எளிதில் பயன்படுத்தக்கூடிய வகையில் மாற்றமடைந்துள்ளது.

ஆன்லைன் வர்த்தகம் பின்வழிக்கற்றல் கற்பித்தல் போன்றவை மிக முக்கியமாகக் கருதப்படுகிறது. சமூகப் பொருளாதார வளர்ச்சியில் இதன் தாக்கம் பெருமளவில் பாதிப்பை ஏற்படுத்தியுள்ளது.

காணொலிக் கருத்தரங்க தொழில்நுட்பம்

இவற்றில் ஆடியோ மற்றும் வீடியோ தொகுப்புகள் டிஜிட்டல் முறையில் அழுத்தி சுருக்கப்பட்டு உண்மையான நேரத்தில் விரிக்கப்பட்டு சீராக்கப்படும் தொழில்நுட்பம் பயன்படுத்தப்படுகிறது. நம் அன்றாடம் காணும் காட்சிகளானது நம்முடைய கருமையத்தில் சுருக்கி பதியப்படுகிறது. அக்கட்சியை மணக்கண்ணால் நம்மால் பார்க்க முடிகிறது. இவற்றின் மூலம் கருத்தரங்க தொழில்நுட்பத்தை எளிதில் புரிந்து கொள்ளலாம்

தொலைபேசி வழிகாட்டுதல் மூலம் கற்பித்தல்

இது ஒவ்வொரு ஞாயிற்றுக்கிழமையும் மாலை 4 மணி முதல் 5மணி வரை தொலைபேசி வாயிலாக நடத்தப்படும் நேரடி ஒலிப்பரப்பாகும்.

இது அனைத்து இந்திய வானொலி நிலையங்களிலும் நடத்தப்படுகிறது. வழிகாட்டுதல் மற்றும் அறிவுரை பகர்தல் நிபுணர்த்தும் வாய்ந்த வல்லுனர்களைக் கொண்டு ஒரு குறிப்பிட்ட தலைப்பை பற்றி விளக்குதல் நிகழ்ச்சி நடைபெற்ற பின் நேரடி கேள்வி பதில் நிகழ்ச்சிகள் தொடர்ந்து நடத்தப்படுகிறது. அப்பகுதியில் உள்ள மாணவர்கள் தொலைபேசியின் வழியாக தங்களது சந்தேகங்களைக் கேட்டு தெளிவு பெறுவதற்கு இது வழிவகுக்கிறது.

இதன் தலைமையகம் டெல்லியில் மார்ச் மாதம் 2002ம் ஆண்டு தொடங்கப்பட்டது. இவை மத்திய மனித வள மேம்பாட்டுத்துறை அமைச்சகத்தின் கட்டுப்பாட்டில் இது இயங்குகிறது.

சாக்ஷட் போர்டல் : (Sakshat portal)

இது கல்விக்காக மத்திய மனித வள மேம்பாட்டுத் துறையில் வழிகாட்டுதலால் உருவாக்கப்பட்ட ஓர் இணையதளம் ஆகும். அக்டோபர் 2006ல் அப்போதைய குடியரசுத்தலைவர் டாக்டர்.A.P.J.அப்துல்கலாம் அவர்களால் இத்தனமானது வெளியிடப்பட்டது.

இந்திராகாந்தி தேசிய திறந்தவெளிபல்கலைக்கழகத்தின் இ-ஞான்கோஸ் என்னும் கல்வி ஊடகமானது இத்தளத்தை மேம்படுத்தியது.

கணினி பயன்பாட்டு நூலக அமைப்பு முறை : (Wage of E-library System)

கணினியின் துணைக்கொண்டு சாதாரண நூலகத்தை எண் மயமாக்கப்பட்ட நூலகமாக (Digital Library) மாற்ற முடியும் அதாவது ஒரு நூலகத்திலுள்ள நூல்கள். இதழ்கள், பத்திரிக்கைகள் நாவல்கள், செய்தித்தாள்கள் போன்றவற்றை கணினியில் பதிவேற்றம் செய்து அவ்வப்போது புதுப்பிக்கும் முறையே எண்மயமாக்கம் (Digitalization) எனப்படும்.

நூலகத்திலுள்ள நூல்களை துறைவாரியாக பிரித்து நூலின் பெயர் எழுதியவர் பெயர் எண் போன்றவற்றை முறையாகப் பதிவு செய்ய வேண்டும்.

இணையதளத்துடன் கூடிய கணினியைப் பயன்படுத்தி மின்நூல்களை சேகரிக்க முடியும் மேலும் முக்கியமான நூல்களை சேகரிக்க முடியும் மேலும் முக்கியமான நூல்களை வருடியின் உதவியால் படங்களாக மாற்றி கணினியில் சேகரிக்க முடியும்.

ஆன்லைன் நூலகங்களைப் பயன்படுத்தி தேவையான நூல்களைப் பெற்று அவற்றையும் பயன்படுத்த வழி செய்ய முடியும்.

கற்றல் கற்பித்தல் பற்றிய தகவல் தொடர்பில் செயல்முறைகள் : (Modern Teaching Learning Process)

கற்றல் என்பது ஒருவரிடம் ஓரளவு நிலையான மாற்றத்தை ஏற்படுத்தும் செயல் கற்பித்தல் மாணவர்களிடம் நடத்த மாற்றங்களை ஏற்படுத்தவதை நோக்கமாகக் கொண்ட செயல்பாடுகளைக் கொண்டது கற்றல் கற்பித்தல் என்னும் இரு செயற்பாடுகளுமே ஒரே இலக்கினை நோக்கி செயல்படுகின்றன.

ஆசிரியர் கற்பித்தலை மேற்கொள்ளும் போது நமது மாணவர்களிடம் கற்றலை ஏற்படுத்திடும் நோக்கத்துடனையே செயல்படுகிறார். ஆனால் அவரது முயற்சிகள் அனைத்தும் மாணவர்களிடமும் பலன் அளிக்கும் என்றோ, உறுதியுடன் கூற முடியாது.

தகவல் தொடர்பியல் என்பது சொல்லிற்குப் பொதுமையாக்குதல் ஒரு குறிப்பிட்ட சமூக சூழலில் செய்து அனுப்பு நபருக்கும் பெறுநருக்கி இடையே நிகழும் செய்தி பரிமாற்ற செயல்முறையே ஆகும்.

முடிவுரை

கற்றல் கற்பித்தலின் இன்றைய நவீன மின்னணுவியலின் மூலம் கற்பித்தலின் நிகழ்வாக ஆசிரியர்களுக்கும் மற்றும் மாணவர்களுக்கும் இருவருக்கும் இடையே விரிவாக விளக்கப்படுகிறது.

இவற்றின் மூலம் இன்றைய கல்வி உலகம் உங்கள் கையில் போல் சுழல்கிறது.

மகளிர் மேம்பாட்டில் உயர்கல்வி

ந.கல்பனா,

இளநிலை ஆய்வாளர், வெ.ப.சு.தமிழியல் ஆய்வுமையம்,
ம.தி.தா.இந்துக்கல்லூரி.

முன்னுரை

மகளிர் உயர்வதற்கும், அதிகாரம் பெறுவதற்கும் கல்வி பெற வேண்டியது மிகவும் இன்றியமையாதது. உலக அளவில் ஐம்பது சதவீத பெண்கள் கல்வி கற்றுள்ளனர். இது நூறு சதவீதமாக உயரவேண்டும். எதிர் கால சமுதாயம் ஆரோக்கியமானதாக உருவாக பெண்கள் கல்வி கற்பது அவசியமாகும். இந்தியாவில் பெண்களுக்கு சவால்கள் நிறைந்துள்ளது. பெண் கல்வியால் மட்டுமே மிகப்பெரிய பொருளாதார மற்றும் சமூக மாற்றத்தை உருவாக்க முடியும். இன்று கிராமங்களில் கூட உயர்கல்வியின் அவசியத்தை பெண்கள் உணர்ந்துள்ளனர். இன்றைய மகளிரிடையே உயர்கல்வி பற்றிய எண்ணம் எவ்வாறு அமைந்துள்ளது என்பதை விளக்கும் விதமாக இக்கட்டுரை அமைய உள்ளது.

உயர்கல்வியும் - மகளிரும்

ஒரு நாட்டின் வளர்ச்சியை ஊக்குவித்திடவும் உயர்த்திடவும் முக்கியப் பங்களிப்பது உயர்கல்வி. உயர்கல்வியின் முக்கியக் கடமை கற்பித்தல், பயிற்சி அளித்தல், ஆய்வுப்பணி மேற்கொள்ளுதல், மனிதவளத்தை உருவாக்குதல் ஆகியன ஆகும். உயர்கல்வி நிறுவனங்கள் கற்பித்தல் மூலமும் ஆராய்ச்சி மூலமும் அறிவுத்திறனை மாணவர்களுக்கு புகட்டி வருகின்றன. கற்பித்தல் அறிவை பெறுவதற்கு உதவி செய்கிறது ஆராய்ச்சி. அறிவின் புது எல்லைகளைக் கண்டறிய உதவி செய்கிறது.

உலகம் முழுவதும் மகளிருக்கு உயர்கல்வி அளித்திட வேண்டியதன் அவசியம் இன்று உணரப்பட்டுள்ளது. 21ஆம் நூற்றாண்டில் மகளிர் உயர்கல்வி பெற வேண்டியதன் அவசியத்தை உணர்ந்து இந்தியா உயர்கல்வித் துறையில் பல மாற்றங்கள் செய்துகொண்டு வருகிறது. உயிர் ஆணுக்கும் பெண்ணுக்கும் சமமானதே. அப்படியெனில் கல்வியிலும் சமவாய்ப்பு இருக்க வேண்டும். வேளாண்மை, கலை, மருத்துவம், அறிவியல், தொழில்நுட்பம் போன்ற பல்வேறு தொழிற்சாலைகளில் பயிற்சி பெற்ற ஆண்களையும், பெண்களையும் பெறுவதற்காகும், சமுதாயத்தில் சமத்துவம் பரவி சமூக நீதி செழிப்பதையும், சமுதாய, பண்பாட்டு வேறுபாடுகள் குறைக்கப்படுவதற்கும் மகளிரின் உயர்கல்வி என்பது முக்கிய பங்கு வகிக்கிறது.

மகளிர் கல்வியின் அவசியம்

எந்த ஒரு சமுதாயத்திலும் மகளிரின் உயர்வுக்கு உறுதுணையாய் இருக்கக்கூடிய ஒரே காரணி கல்விதான். கல்வி பெறுவதானல் ஒரு பெண் தன்னைப் பற்றியும், தன்னைச் சுற்றியுள்ளவற்றைப் பற்றியும் நன்கு அறிந்துகொள்வதோடு சமுதாயத்தில் ஒரு அந்தஸ்தைப் பெறவும், நேர்மறை சுயமதிப்புப் பெறவும், தன்னம்பிக்கை பெறவும், வாழ்வின் சவால்களைச் சந்திக்கத் தேவையான தைரியத்தையும், மன பலத்தையும் வழங்குவது கல்வி மட்டும்தான். இதோடு நின்றுவிடாமல், தான் பெற்ற கல்வியால் ஒரு பெண் பணி செய்து பொருள் ஈட்டிவதும் அதன்மூலம் குடும்பப் பொருளாதாரம் உயரச் செய்வதோடு தனது சமுதாய அந்தஸ்தை உயர்த்திட முடியாது.

எந்த ஒரு நாடும் ஆண்களின் சரிபாதியான பெண்களை, திறமை வாய்ந்த மனிதவளப்பிரிவை ஒதுக்கித்தள்ளிவிட்டு முன்னேறிவிட முடியாது. நமது புகழ்பெற்ற கவிஞரும் இலக்கிய நோபல் பரிசு பெற்றவருமான ரவீந்திரநாத் தாகூரின் வார்த்தைகளான “ஒரு நாட்டின் தலைவிதியை அமைப்பதும் நிர்ணயிப்பதும் பெண்கள் தான். லில்லி மலரைப் போல மென்மையாகவும், மிருதுவாகவும் இருப்பினும் அவர்கள் இதயம் ஆணின் இதயத்தை விட பலமானதும் தைரியமானதுமாகும்”.

சமுதாய மறுமலர்ச்சியில் மகளிர்

உலக நாடுகளிலேயே நமது நாடுதான் முதலாவது பெண் பிரதமரையும் பெண் குடியரசுத்தலைவரையும் பெற்றது. தற்போது மக்களவையின் தலைவராக உள்ளவரும் பெண்ணே. 2013-ஆம் ஆண்டில் நடைபெற்ற 16-வது மக்களவைத் தேர்தலில் 50 சதவீதம் மகளிர் ஓட்டளித்தனர் என்பது மனநிறைவளிப்பதாயுள்ளது. தொழிற்சாலைகளில் கல்வித்தகுதி பெற்ற அதிக எண்ணிக்கையிலான பெண்களைப் பெற்றுள்ள நாடுகளில் இந்தியாவும் ஒன்று. பெண் கருக்கொலை, வரதட்சனை, குடும்ப வன்முறை எனப் பல சமூக அவலங்கள் இன்றும் இருக்கத்தான் செய்கின்றன. சமுதாய மாற்றத்தை ஏற்படுத்தும் ஒரு கருவி கல்வி என்பதை நாம் உறுதியாக நம்புகிறோம். கல்வி அறிவையும், புத்திசாலித்தனத்தையும், திறமையையும் கூட்டிடும். நமது உணர்வுகளையும், பார்வைகளையும் கல்வி நுண்மையாக்குகிறது.

மகளிர் எதிர்கொள்ளும் பிரச்சினைகள்

இந்திய மகளிர் எதிர்கொள்ளும் பிரச்சனைகளில் முக்கியமானவை சத்து பற்றாக்குறை, உடல் நலமின்மை, கல்வியறிவின்மை, முறைதவறி நடத்தப்படல், மிகுந்த வேலை, அதிகாரமின்மை போன்றன. குறிப்பாக இந்தியாவில் மகளிர் கல்விக்கு உயி முக்கியத்துவம் கொடுக்கப்பட்டதில்லை. இடைக் காலத்திலிருந்தே மகளிருக்கு கல்வி மறுக்கப்பட்டு வந்துள்ளது. இடைக் காலக்கருத்துப்படி மகளிருக்கு வீட்டுக் கல்வி மட்டுமே போதுமானது. இதே கருத்து இன்றளவும் காணப்படுகிறது. சிறுமிகள் வீட்டு வேலையைக் கவனித்தால் போதும். கல்வி அவர்களுக்கு இரண்டாம்பட்சம்தான். நகர்ப்புறங்களில் காட்சி மாறி மகளிர் உயர்கல்வி பெற்றுள்ள போதிலும், கிராமங்களில் வாழும் மகளிர் பலர் இன்னும் இடைக் காலத்திலேயே வாழுகின்றனர். ஒரு பெண்ணால் எந்தெந்தக் கனவுகளை எல்லாம் கண்டிட முடியுமோ அந்த கனவுகளை எல்லாம் இந்திய மகளிர் நனவாக்கியுள்ளனர்.

மகளிர் எதிர்கொள்ளும் சவால்கள்

சமுதாயத்தில் மாற்றம் ஏற்படுத்திதும் வல்லமை பெற்றவர்கள் மகளிர். எனினும் மகளிர் தமது முன்னேற்றத்திலும் அதிகாரம் பெறுதலிலும் பல சவால்களை எதிர்கொள்வதென்னவோ உண்மைதான். பண்பாட்டு பாரம்பரிய மதிப்புக்கள் இந்திய மகளிருக்கும் அவர்களின் கல்விக்கும் இடையில் தடையாக இருக்கின்றன. சமுதாயத்தின் அடித்தளத்தில் காணப்படும் வேறுபாடுகள் களையப்படுவதற்காக மகளிரின் கல்வி உரிமை சிறப்பான சாதனை புரிந்துள்ளது. சமுதாயத்தின் இவ்வேறுபாடுகளால் மில்லியன் கணக்கிலான சிறுமிகள் தரமான கல்வி பெற முடிவதில்லை. இதனால் துர்பாக்கிய வாழ்க்கை முறைக்கு அவர்கள் தள்ளப்படுகிறார்கள். சிறுமியருக்கும் பெண்களுக்கும் கல்வி வாய்ப்பு அளிக்கப்படுவதால் அவர்கள் குடும்பம் தொடர்பான முடிவுகளை எடுத்திடும் திறன் பெற்றிருவதோடு சமுதாயத்தில் மாற்றம் கொண்டு வரவும் முடிகிறது. பொறுப்பிலிருப்போர் மகளிருக்குக் கல்வியை மறுப்பதற்கான ஒரு காரணமாகக் கூறுவது கல்வி பெற்ற மகளிர் ஆற்றல் மிக்கவர்களாக ஆகிவிடுகிறார்கள் என்று எதிர்சக்திகளின் எண்ணங்களை வெல்வதே மகளிரின் பெரிய சவாலாக அமைகிறது.

இந்திய மற்றும் தமிழக மகளிரின் உயர்கல்வி வளர்ச்சி

கிராமப்புற இந்தியாவில் விவசாயம், அது தொடர்பான வேலையில் ஈடுபட்டுள்ளோரில் அரைசதவீதத்திற்கும் மேல் மகளிர் உள்ளனர். இந்தியாவில் உள்ள மக்களின் வேளாண்உற்பத்தியை எடுத்துக்கொண்டால் பாதிக்குமேல் அதில் மகளிரின் உழைப்பே உள்ளது. வளரும் நாடுகளின் எதிர்காலப் பொருளாதார வளர்ச்சிக்குத் திறவுகோலாய் இருப்பது கல்விதான். அத்தகைய கல்வியை கற்று இன்று இந்திய மகளிர் இன்று அனைத்துத் துறைகளிலும் பரிமளிக்கின்றனர். இந்திய மகளிரால் சிறப்பு செய்யப்படாத தொழிற்பிரிவு எதுவுமேயில்லை என்று கூறலாம். சமுதாயப் பணியிலிருந்து விண்வெளி ஆய்வு வரை, அவர்களால் வெல்லப்படாதது எதுவுமேயில்லை. அரசியலாகட்டும், விளையாட்டு, பொழுதுபோக்கு, இலக்கியம், தொழில்நுட்பம் இன்னும் எதுவாகட்டும் எல்லாவற்றிலும் அவர்கள் முத்திரை உள்ளது. சமுதாயக் கட்டுப்பாடுகள் தன்னைப் பின்தங்க அனுமதிப்பதில்லை. இன்றைய மகளிர், மற்ற எந்தவொன்றை விடவும் கல்விக்கே முக்கியத்துவம் அளிக்கின்றனர்.

தமிழகத்தில் மகளிர் உயர்கல்வி மிக பெரிய மறுமலர்ச்சியை பெற்றுள்ளது. மகளிரின் மொத்த மாணவர் சேர்க்கையை அதிகரிக்கும் வகையில் பல்கலை மற்றும் கல்லூரிகள் பல தொடங்கப்பட்டுள்ளது. மேலும் வகுப்பறை மாணவர் எண்ணிக்கையும், பல பாடப்பிரிவுகளும்

அதிகரிக்கப்பட்டுள்ளது. தற்போது கலை, அறிவியல், கல்வியியல், பொறியியல் தொழில்நுட்பம், மருத்துவம், விவசாயம், கால்நடை மற்றும் சட்டக்கல்வித் துறையில் கடந்த 10 ஆண்டுகளில் மகளிரின் சேர்க்கை எண்ணிக்கை அதிகரித்துள்ளது குறிப்பிடத்தக்கதாகும்.

மேலும் தமிழகத்தில் இலவச விலையில்லா மடிக்கணினி, குடும்பத்தில் முதலில் பட்டப் படிப்ப பயில் வாய்ப்புக் கிடைத்தவர்களுக்கு உதவித்தொகை, கலைக்கல்லூரி ஆசிரியர்கள், மாணவ மாணவியர்களுக்கு வெளிநாட்டில் கல்வி என்ற திட்டத்தின் கீழ் இங்கிலாந்து சென்று பயின்று வர பயணச் செலவுடன் கூடிய உதவித்தொகை, இலவசப் பேருந்துக் கட்டணச்சலுகை, தமிழில் பயில்வோருக்கு கட்டணச்சலுகை, போன்ற பல முன்னோடித்திட்டங்களால் மகளிர் கல்விக்கு மற்றைய மாநிலத்தைவிட தமிழகம் முன்னுரிமை அளித்து வருகிறது என்பதற்கு இதுவே சான்றாகும்.

முடிவுரை

- ❖ மகளிர் உயர்கல்வி பெற்ற நாடு சமூக பொருளாதார முன்னேற்றத்தை எட்டும். ஆனால் பிற்போக்கு சிந்தனை கொண்ட சில பிரிவுகள் மகளிரை உயர்கல்வி பெற அனுமதிப்பதில்லை. இந்நிலை மாறவேண்டும்.
- ❖ வளர்ச்சியடைந்த மாநிலங்களில் கூட மகளிர் உயர்கல்வி சேர்க்கை விகிதம் 40 விழுக்காட்டை எட்டாதது கவலைக்குரியது.
- ❖ மேலும் அவர்களுக்கு கல்வி நிறுவனங்களில் போதுமான வசதிகளைச் செய்து உயர்கல்வி பெற வழிவகை செய்ய வேண்டும் என்பதை வலியுறுத்தும் விதமாக இக்கட்டுரை அமைந்துள்ளது.

உயர்கல்வியில் மாணவர்கள் எதிர்கொள்ளும் சவால்கள்

பா.மாரி(எ)சாரதா

இளநிலை ஆய்வாளர், வெ.ப.சு.தமிழியல் ஆய்வுமையம்,
ம.தி.தா.இந்துக்கல்லூரி

முன்னுரை

கல்வி என்பது தேச மேம்பாட்டிற்குத் தேவையான அங்கீகரிக்கப்பட்ட ஒரு அதீத கருவியாகும். குறிப்பாக உயர்கல்வியானது 21ஆம் நூற்றாண்டின் அறிவுசார் சமூகக் கட்டமைப்பில் முக்கியப்பங்கு வகிக்கிறது. உயர்கல்வியானது உலகளவில் பல்வேறு கூட்டமைப்புடன் நல்லுறவைப் பெற்று பல நிறுவனங்கள், திட்டங்கள்,பெரிய அளவிலான பல்வேறு பல்கலைக்கழகங்கள் போன்றவற்றுடன் சிறப்புற விளங்குகிறது. இத்தகைய உயர்கல்வியில் மாணவர்கள் எதிர்கொள்ளும் சவால்களை விளக்கும் விதமாக இக்கட்டுரை அமைய உள்ளது.

வலிமைகள்

1. மேம்படுத்தப்பட்ட கல்விநிறுவனங்கள்

சுதந்திர காலத்திலிருந்தே இந்திய உயர்கல்வி நிறுவனங்களானது அதிகப்படியான வாய்ப்புகளை வழங்கும் பொருட்டு சிறந்த பயிற்சியினை அளிக்கும் பல விதமான பாடப்பிரிவுகள் சான்றிதழ் பட்டம், தொழில் நுட்பப்பட்டயபடிப்புகள், முதுகலை படிப்புகள் போன்றவற்றை கொண்டுள்ளது. உலகஅளவில் அங்கீகரிக்கப்பட்ட தொழில்நுட்ப நிறுவனங்களான இந்தியஅறிவியல் நிறுவனங்கள், இந்தியதொழில் நுட்பநிறுவனங்கள், இந்தியமேலாண்மை நிறுவனங்கள் மற்றும் பல பாரம்பரியபல்கலைக் கழகங்களையும் கொண்டுள்ளது நமது நாடாகும்.

2. மிதமானபொருளாதாரவளர்ச்சி

பொருளாதார தாராளமாயமாக்கலுக்குப்பின் இந்தியாவின் பொருளாதார வளர்ச்சியானது கல்விக்காக அதிகப்படியான முதலீடுகளை அளித்துள்ளது. பதினொன்றாவது ஐந்தாண்டுத் திட்டவரைவு அறிக்கையில் உயர்கல்வித் துறையில் அதிகப்படியான நிதி ஒதுக்கீடு செய்யப்பட்டது.

3. சமூகவிழிப்புணர்ச்சி

கல்விமேம்பாட்டைய சமூக விழிப்புணர்ச்சியுடன் தனியார் கல்வி நிறுவனங்களைக் கண்காணித்துத் தரமான கல்வி நிறுவனங்களைத் தேர்வுசெய்தல் இன்றியமையாததாகும். இந்தியாவில் போதுமான தரமான கல்விநிறுவனங்கள் உள்ளன என்பதைச் சமூகவிழிப்புணர்வு மூலமும் தரமநிலைப் பெறப்பட்ட நிறுவனங்கள் மூலமும் அறியப்பட்டுள்ளது.

குறைகள்

1. ஆசிரியர் பற்றாக்குறை

சுரியான கல்வியாளர் கிடைக்கப்பெறாமல் உயர்கல்விதுறையில் சுமார் பத்தாயிரத்திற்கும் மேற்பட்ட கல்வியாளர் பணியானது இன்றளவும் நிரப்பப்படாமல் உள்ளது. நிரந்தரமற்ற தொகுப்புதிய பணியாளர்களின் மூலம் காலியாக உள்ள கல்விப் பணியிடங்கள் நிரப்பப்பட்டுள்ளது. பாராளுமன்ற நிலைக்குழுவின அறிக்கையின்படி கடந்த மேமாதத்தில் மத்திய பல்கலைக்கழகங்களின் மொத்தமுள்ள 16,324 அனுமதிபெற்ற ஆசிரியர் பணியிடங்களில் 6254பணியிடங்கள் நிரப்பப்பட்டுள்ளன. மாநில அளவில் 47 பல்கலைக்கழகங்களில் 11,645 பணியிடங்கள் ஒப்புதல் பெறப்பட்ட பணியிடங்களாகும் அதில் 4710 பணியிடங்கள் நிரப்பப்படாமல் உள்ளது. இதுபோன்ற ஆசிரியர் பற்றாக்குறைகள் உயர்கல்விதுறை வளர்ச்சிக்கு மிகப்பெரிய தடைக்கல்லாக உள்ளது.

2. போதியவழிகாட்டுதல் இல்லாமை

உயர்கல்வித்துறையில் மொத்தமாக 13 வழிகாட்டு நெறிக்குழுமங்கள் வழிமுறைகளை வகுத்துவருகின்றன. ஒவ்வொரு வழிகாட்டும் குழுமமும் ஒவ்வொரு பணியினை தனித்தனியே மேற்கொள்கிறது. வழிகாட்டும் நெறிமுறைக் குழுமங்களின் பல்வேறு சட்டங்களானது ஒன்றுக்கொன்று மாறுபட்டனவாகவும். ஆவை பல்வேறு சட்டங்களாக ஒன்றுக்கொன்று மாறுபட்டனவாகவும் அவை பல்வேறு காலகட்டங்களில் பலஅமைச்சகங்களால் உருவாக்கப்பட்டவையாகவும் உள்ளன. இவ்வாறான அதிகப்படியான வழிகாட்டுக் குழுமங்களால் நடைமுறைச் சிக்கல்களோடு ஊழல் மற்றும் இதரகுற்றங்களும் நிகழுகின்றன.

3. ஆராய்ச்சிக்கான குறைவான முக்கியத்துவம்

ஆராய்ச்சியின் முக்கிய நோக்கமானது புதிய வளமான சிந்தனை மற்றும் அறிவினைத் தோற்றுவித்தலாகும். தனியார் நிறுவனங்களின் இதரப் பிரிவுகளில் இலாபநோக்கோடு செயல்படுகிறது. ஆராய்ச்சியினை முக்கிய வியாபாரமாக, இலாபம் தரும் நோக்கத்தோடு அணுகக்கூடாது. ஆனால் தொடர் முதலீடுகளால் ஆராய்ச்சி நிறுவனங்கள் மிகக் குறைவான ஆராய்ச்சிகளையே மேற்கொள்கின்றன. ஆகவே இன்றைய சமூக சூழ்நிலைக்கேற்ப ஆராய்ச்சி முறைமையினை மாற்றியமைக்க வேண்டும்.

வாய்ப்புகள்

1. உழைக்கும் இளைஞர்களின் எண்ணிக்கை

இந்தியாவின் 1.1 பில்லியன் மொத்த மக்கள் தொகையில், 15-64 வயது வரை உள்ளவர்கள் சுமார் 672 மில்லியன் மக்கள் ஆவர். இவ்வாறான மதிப்பிடற்கரிய சொத்தாக உள்ள இளைஞர்களின் தரம் உயர்த்துவது, அறிவு மற்றும் திறனை மேம்பாடுடைய வழிவகை செய்தல் மிகவும் அவசியமாகும். இது இந்திய நாட்டின் வளர்ச்சிக்கு உறுதுணையாகும்.

2. கல்வியில் வாய்ப்புகளை விரிவுபடுத்துதல்

இந்திய தேசிய மாணாக்கர் சேர்க்கை விகிதத்தினை வரும் 2020ம் ஆண்டிற்குள் சுமார் 30 சதவீதமாக உயர்த்துவதற்கு நாம் அதிகப்படியான வளர்ச்சியினைப் பெற, கல்வி வழிமுறைகளை நெறிமுறைப்படுத்தி நிலையான கல்வி அறிவினைப் பெறத் திட்டங்களை விரிவுபடுத்த வேண்டும்.

3. கல்வி உலகமயமாக்கல்

இந்திய நாடானது உலகளவில் சிறந்த உயர்கல்வி மையமாக விளங்குகிறது. இந்திய நாட்டில் கல்வி உலகமயமாக்கலை விரிவுபடுத்துவதன் மூலம் நிலையான நீடித்த கல்வி அறிவினை நாம் பெற முடியும். அரசானது பல்வேறு நடவடிக்கைகளை மேற்கொண்டு கல்வி மற்றும் நிறுவனங்களின் மேம்பாட்டுத் திட்டங்கள் மூலம் உயர்கல்வி மேம்பாடு அடைவதற்கு முயல் வேண்டும்.

எதிர்கொள்ளும் சவால்கள்

1. கல்வி வியாபாரமாக்கப்படல்

கல்வி பொதுவுடமையாக்கப்பட வேண்டும். இன்றளவிலும் தொழில்நுட்பம், மருத்துவக் கல்வி நிறுவனங்கள் மற்றும் பல்கலைக்கழகங்கள், கல்லூரிகள் போன்ற நிறுவனங்கள் அதிகப்படியான கல்விக் கட்டணங்களை வசூலிப்பது தொடர்ந்து கொண்டிருக்கின்றன. இதனால் சாதாரண மனிதனுக்கு கல்வி என்பது கிடைக்கப் பெறாத ஒன்றாகிவிட்டது. அரசு இதனைக் கருத்தில் கொண்டு புதியவகையான சட்ட வரைவுகளை பாராளுமன்றத்தில் நடைமுறைப்படுத்தி அனைவருக்கும் முறையான உயர்கல்வி கிடைக்க ஆவன செய்ய வேண்டும்.

2. கேள்விக்குறியாகும் தரமான கல்வி

காளான்கள் போல் பெருகிவரும் தனியார் கல்வி நிறுவனங்களில் உயர்கல்வியின் தரத்தினை மேம்படுத்தும் பொருட்டு தரக் கட்டுப்பாட்டினை கட்டயமாக்கிடும் வகையில் சட்ட முன்வரைவுகளை முன்மொழிந்து கண்காணித்துவர வேண்டும்.

3. பொருளாதாரம் மற்றும் சமூக கலாச்சாரக் காரணிகள்

நாட்டில் வேலைவாய்ப்பு அற்றோர் எண்ணிக்கை தொழில்நுட்ப வல்லுநர்கள் பற்றாக்குறை, உயர்கல்விக்கான செலவினங்கள் போன்றவை உயர்கல்வியைப் பாதிக்கும் பொருளாதார காரணிகளாகும். அரிதாகி வரும் வாய்ப்புகள், சமூகப் பார்வையில் பெண்கள், சமூக வேற்றுமை, கிராம-நகர வேறுபாட்டு பாதிப்புகள் போன்றவை உயர்கல்வி அறிவு மேம்பாடு அடைய தடைகளாக உள்ள சமூக-கலாச்சாரக் காரணிகளாகும் என்று கல்வியாளர்கள் கூறுகிறார்கள்.

முடிவுரை

பல்வேறு சமூக பொருளாதார காரணிகளால் உயர்கல்வியில் மாணவர்களின் வலிமைகள், உயர்கல்வியில் காணப்படும் குறைகள், உயர்கல்வியின் மூலம் கிடைக்கப்பெறும் வாய்ப்புகள், மாணவர்கள் எதிர்கொள்ளும் சவால்கள் போன்றவை விளக்கப்பட்டுள்ளது. இவற்றில் பின்தங்கிய மாநிலங்களின் நிலைமை கவலைக்குறியதாக உள்ளது. ஆகவே நமது திட்டமிடலும், செயல்பாடுகளும் சமன்பாடுடைய மாணவர் சேர்க்கை விகிதத்தை உயர்கல்வியில் அதிகரிக்க முயற்சி மேற்கொள்ள வேண்டும் என்பதே இக்கட்டுரையின் முடிவாக அமைகிறது.

இந்தியாவில் உயர்கல்வியின் தற்போதைய நிலை

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ம.தி.தா.இந்துக்கல்லூரி.

முன்னுரை

ஒரு நாட்டின் மொத்தக் கல்வி அமைப்பில் உயர்கல்விதுறையானது மிகவும் முக்கியமானதொரு இடத்தைப் பெறுகிறது. இதற்கு காரணம் ஆதாயமிக்க வேலைவாய்ப்புகளைப் பெற்றிடத் தேவையான தகுதிகளையும் திறன்களையும் அவர்களுக்கு இது வழங்கி வருகிறது. உயர்கல்வித்துறையில் பல இந்திய ஈடுபட்டுள்ளன. இந்திய நாட்டின் மக்கட்தொகை அமைப்பை கவனிக்கும்போது 25 வயதிற்கும் குறைந்த இளைஞர்களின் எண்ணிக்கை மிகுந்துள்ளது. இவர்கள் யாவரும் நல்வாழ்வு பெற்றிட இவர்களுக்குத் தேவையான உயர்கல்வி வாய்ப்புகளையும் வசதிகளையும் செய்து கொடுப்பது இன்றியமையாத ஒன்றாக அமைந்துள்ளது.

உயர்கல்வி நிறுவனங்களின் எண்ணிக்கை

கடந்த ஆண்டுகளில் உயர்கல்வித் துறையானது வியத்தகு வளர்ச்சி கண்டுள்ளது. 1950 -51 ஆம் ஆண்டில் 30 பல்கலைக்கழகங்களையும் 695 கல்லூரிகளையும் கொண்டு விளங்கிய உயர்கல்வித்துறையானது சமீபத்திய பல்கலைக்கழக மானியக்குழுவின் கணக்கின்படி 2012-13ஆம் ஆண்டில் 700 பல்கலைக்கழகங்களையும் 35000 கல்லூரிகளையும் கொண்டு செயல்பட்டு வருகிறது. உயர்கல்வியை நாடும் மாணவர்களின் எண்ணிக்கை ஆண்டுக்கு 25 மில்லியனுக்கும் அதிகமாகும். இந்தியாவானது உயர்கல்வித்துறையில் மிகப்பெரிய அளவில் செயல்பட்டு வரும் உலகநாடுகளின் வரிசையில் 3வது இடத்தில் உள்ளது.

உயர்கல்வியில் தனியார் துறை வகிக்கும் இடம்

நாட்டின் மொத்த உள்நாட்டு உற்பத்தியில் ஒரு தசவீதத் தொகையை அரசானது உயர்கல்விக்கு என செலவிட்டுள்ளதாக மதிப்பிடப்பட்டுள்ளது. எனினும் உயர்கல்வியில் நமது தேவையுடன் ஒப்பிட்டு நோக்குகையில் இது மிகவும் குறைந்த அளவேயாகும். இக்காரணத்தால் தனியார் துறை உயர்கல்வி நிறுவனங்கள் பல்கிபெருகியுள்ளன. 2007-12 ஆண்டுகளுக்கு இடைப்பட்ட 5 ஆண்டுகாலத்தில் 60க்கும் அதிகமான வளர்ச்சியை உயர்கல்வி நிறுவனங்கள் கண்டுள்ளன. இதன் விளைவாக 2012 ஆம் ஆண்டில் உயர்கல்விதுறையில் தனியார்துறை நிறுவனங்களின் எண்ணிக்கை 64 சதவீதமாக உயர்ந்துள்ளது.

சமுதாய பிரிவுகளின் அடிப்படையில் மாணவர் சேர்க்கை

வளர்ச்சிப்பாதையில் பீடுநடை போட்டுக் கொண்டிருக்கும் உயர்கல்வித்துறையின் முக்கியக் குறிக்கோளாக இருப்பது சமுதாயத்தின் அனைத்துப் பிரிவினரும் எவ்வித பாரபட்சமும் இன்றி வேறுபாடும் இன்றி தமது கல்வித்தகுதிக்கு ஏற்ப தாம் பயில விரும்பும் பாடப்பிரிவில் சேர்ந்து பயில வாய்ப்பளிக்க வேண்டும் என்பதேயாகும். எனவே உயர்கல்வித் துறையை சமுதாய காரணிகளின் அடிப்படையில் அணுகிடுவதன் மூலம் புரிந்து கொள்ள வேண்டும்.

உயர்கல்வியின் இன்றைய நிலை

1. குறைந்த மாணவர் சேர்க்கை விகிதம்

உயர்கல்வித் துறையில் மொத்த மாணவர்சேர்க்கை விகிதம் 19.4 சதவீதம் என்னும் மிகக் குறைந்த அளவில் இருப்பது தகுதியுள்ள பல இளைஞர்கள் உயர்கல்வியை நாடாமல் இருப்பதை சுட்டுக்காட்டுவதாக உள்ளது. வளர்ச்சியுற்ற மற்றும் வளரும் நாடுகளில் உள்ள மொத்த மாணவர் சேர்க்கை விகிதத்தைக் காட்டிலும் இந்தியாவில் குறிப்பிடத்தக்க விகிதத்தில் குறைவாக இருப்பதை காண முடிகிறது. உயர்கல்விக்கென அரசு செலவிடும் நிதியின் ஒதுக்கீடு உயர் வேண்டிய அதே சமயத்தில் தனியார் நிறுவனங்களும் பெருமளவு

பங்காற்றினால்தான் உயர்கல்வியில் உத்தேச இலக்கை நம்மால் எட்ட முடியும். இத்தகைய பிரச்சனைகள் காரணமாக உயர்கல்வித் துறையில் மாணவர் சேர்க்கை விகிதம் குறைவாகவே அமைந்துள்ளது.

2.வட்டார ஏற்றத்தாழ்வுகள்

நாட்டின் உயர்கல்வியில் சேரும் மொத்த மாணவர் சேர்க்கை விகிதத்தில் வட்டாரங்களின் அடிப்படையில் பெருமளவிற்கு ஏற்றத்தாழ்வுகள் காணப்படுகிறது. இதற்கு காரணம் அம்மாநிலங்களின் போதுமான எண்ணிக்கையில் உயர்கல்வி நிறுவனங்கள் இல்லாமையே ஆகும். அத்தோடு உயர்கல்விக்கென அரசு செலவிடும் தொகையும் மாநிலங்களுக்கு இடையே அதே அளவில் காணப்படுவதில்லை. மாறாக பெருமளவில் ஏற்றத்தாழ்வு காணப்படுகிறது. உயர்கல்வியில் பின்தங்கிய மாநிலங்கள் அதே அளவில் நிதிஒதுக்கீடு செய்து உயர்கல்விக்கான உள்கட்டுமானத்தையும் வாய்ப்புகளையும் உயர்த்திக் கொள்வது இன்றியமையாதது. மொத்த மாணவர் சேர்க்கை விகிதத்தில் மிகவும் பின்தங்கிய நிலையில் இருக்கும் மாநிலங்களுக்கும் வசதியை பெருக்கி கொள்வதற்காக நிதிஒதுக்கீட்டை உயர்த்திட வேண்டியது மிகமிக அவசியம். அப்போதுதான் தேவைக்கேற்ற விகிதத்தில் உயர்கல்வி நிறுவனங்கள் இம்மாநிலங்களில் உருவாகிட முடியும்.

3. ஆசிரியர் பற்றாக்குறை

தகுதியும் திறமையும் வாய்ந்த ஆசிரியர்களை ஈர்க்கவும் தக்கவைத்து கொள்ள முடியாமையும் கடந்த பல ஆண்டுகளாக உயர்கல்வி துறையை பாதித்து தரமான உயர்கல்வி வழங்கிட முடியாமல் செய்துவிட்டன. மாணவர் சேர்க்கை விகிதத்திற்கு ஏற்ற விதத்தில் உயர்கல்வியில் பணியாற்றிட ஆசிரியர்களின் எண்ணிக்கை உயர்ந்திடாதது இதற்கு முக்கிய காரணம். உயர்கல்விக்கு திட்டமிடுவோரின் தனி கவனத்திற்கு உட்பட்டால் தான் போதுமானதாகவும் தரமானதாகவும் இருக்கும்.

4. தரமான உயர்கல்வி நிறுவனங்கள்

கடந்த சில ஆண்டுகளாகவே உயர்கல்வி நிறுவனங்கள் வழங்கிடும் உயர்கல்வியின் தரம் கவலையளிப்பதாகவே இருந்து வந்துள்ளது. சமீபத்தில் வெளியிடப்பட்ட 2011-14 ஆம் ஆண்டுக்கான டைம்ஸ் பத்திரிக்கையின் உயர்கல்வி தரவரிசைப்பட்டியலின் படி முதல் 200 உயர்கல்வி நிறுவனங்களின் தரவரிசைப்பட்டியலின் இந்திய உயர்கல்வி நிறுவனம் ஒன்றுகூட இடம் பெறவில்லை என்னும் உண்மை இந்தியாவில் வழங்கப்படும் உயர்கல்வியின் தரத்தை பிரதிபலிப்பதாகவே உள்ளது. மேலும் நேக், அறிக்கையின் படி 62 சதவீதம் பல்கலைக்கழகங்களிலும் 90 சதவீதம் கல்லூரிகளிலும் வழங்கும் கல்வியின் தரமானது குறிப்பிட்ட நிர்ணய அளவுகளின் படி சராசரி அல்லது சராசரிக்கும் குறைவாகவே உள்ளது என்பதை உணர்த்துகிறது.

முடிவுரை

1. இந்தியாவில் இன்றைய உயர்கல்வியின் நிலை மற்றைய நாடுகளைவிட பின்தங்கிய நிலையிலே உள்ளது.
2. உயர்கல்வி நிறுவனங்களின் எண்ணிக்கை இந்தியாவிலும் குறிப்பாக தமிழ்நாட்டிலும் குறைவாகவே அமைந்துள்ளன. மேலும் சொல்லப்போனால் அதுபற்றிய போதிய விழிப்புணர்வு இன்றி இன்றி இருக்கின்றனர்.
3. மேலும் உயர்கல்வி துறையில் தனியார் துறையும் அரசுக்கு இணையான இடம் வகிக்கின்றன.
4. எனவே இந்தியாவில் உயர்கல்வியானது அனைவரிடம் விழிப்புணர்வு ஏற்பட்டு மற்றைய நாடுகளுடன் ஒப்பிடும் போது இந்தியாவும் உயர்கல்வியில் சிறந்து விளங்கும் நாடாக முன்னேற வேண்டும் என்பதே இக்கட்டுரையின் நோக்கமாக அமைகிறது.

Ict in Innovative Teaching & Learning

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ICT is an acronym that stands for information, communication & technology. The nature of information covers topics such as the meaning and value of information, communication refers to the data communication by electronic means through networks. Technology refers to the current state of humanity's knowledge of how to combine resources to produce desired products to solve problems, fulfil needs, technical methods, skills, processes, techniques, tools and raw materials.

The purpose of ICT in education is generally to familiarize students with the use and workings of computers and related social and ethical issues. The term ICT is now also used to refer to the merging of audio-visual and telephone networks with computer network through a single cabling or link system.

Information and Communication technology are of the rapid development technological fields in the global. Among the developing Countries India reached a significant position in development of ICT. Particularly in the field of education its development is tremendous there is no doubt in the near future's development will be based on ICT.

Innovative teaching is an approach to integrate new teaching strategies and methods into a classroom. Research in education supports the benefits that certain processes, tools and teachers implement new methods before they appeal to mainstream educators.

Technology plays a key role in innovative teaching. Innovative teachers use new technology to enhance or expand upon the student experience. The transition from traditional black board and overhead projector instruction into computer-aided presentation was innovative.

Smart Board

In ICT, schools & colleges have started using smart boards. A smart board allows a teacher to do multiple things such as Project slides, show a video or connect to the internet. If a teacher writes on a smart board in one class, it gets replicated in another class. It saves time as teachers do not have to keep erasing the writing.

Online Assignments:

Students seldom have to carry worksheets as even homework has gone online. Now teachers create and post assignments online and share them with students. Students work on documents from wherever they are and collaborate with others in a simple and easy way neither teachers nor students have to worry about misplacing a file. Everything is saved online, accessible from anywhere. In case a child misses school, he can first log on to the groups and get information on what happened that day.

Lesson Notes:

Teachers can now upload their lesson plans online. Once this is done, the principal can check if the teacher is following the curriculum and instantly gives feedback on the lesson plan.

ICT is revolutionizing every aspect of classroom teacher's teaching students learning audio-visual aids and even evaluation. The whole classroom setup is now getting changed.

Smart Class:

Smart class is a solution designed to help teachers in meeting with new challenges and developing student's abilities and performance. It helps the teachers to access multimedia content and information that can be used for teaching students more effectively. It helps the teachers in expressing their views and ensures them that every student is understanding and learning. Smart class brings in technology right next to blackboard for teachers in the classroom. Students learn difficult and abstract curriculum concepts watching highly engaging visuals and animations. This makes learning an enjoyable experience for students while improving their overall academic performance in school. It also enables the teachers to instantly assess and evaluate the learning achieved by their students in the class.

ICT opens up opportunities for learning because it enables learners to access, extend, transform and share ideas and information in multi-modal communication styles and format. It helps the learner to share learning resources and spaces, promote learners-centered and collaborative learning principles and enhance critical thinking, creative thinking and problem solving skills pathway online platform supporting virtual placements. Make it work. Guide on integrating virtual mobility in international work placements. ICT for learning innovation from micro innovation to large scale adoption, open learning in times of crisis. Unique institutional quality certification for the use of ICT in learning and teaching.

Once thought of as just a part of resources we have come to see how technology can be so much more than that. It can play a key role, and at times a leading role in all elements of the teaching and learning environment. Technology can shape, and reshape, who is the learner and who is the teacher. It can open up knowledge and content that otherwise would be less accessible. Through access to open educational resources the depth and breadth of technologies available today affords learning environments much diversity and opportunity for leveraging ICT as a through line for educational change.

Use of ICT Education

ICT is providing its users to utilize its resources throughout the world at anytime and anywhere due to this facility from ocean of knowledge through internet; the teacher's students can utilize it for their teaching-learning.

Anytime and Anywhere

On defining feature of ICT and its ability transcend time and space ICT and its ability transcend time and space. ICT make possible asynchronous learning to its learners for example:- online course materials can be accessed 24 hours of a day and 7 days a week. Additionally received simultaneously by multiple, geographically dispersed learners.

Learning Resource

Teachers and learners no longer have to rely on printed books and materials in physical media housed in libraries for their educational needs with an Internet, a wealth of learning materials is every subject and variety of media can be accessed from anywhere at any time of the day. This is significant for school in developing countries have limited and out data library resources. So ICT facilities provide access to resource persons, mentors, experts, researchers professional, business leaders and peers all over the world.

Motivating in Learning

ICT technologies such as videos, television and multimedia computer software are used to provide challenging and authentic content that will engage the student in the learning process. Interactive radio makes use to sound effects, songs, and dramatization, comes skills and other performance convention to compel the students of listen and becomes involved easy to produce and manage.

ICT ensures that the useful resources can be easily designed and produced with little technical knowledge, ambitious ideas, reusability and depend upon technical expertise in their production and distribution. It is easy to design quickly for a teaching-learning objective. Reusability of learning content is desirable for economics reason and giving faster learning.

The use of ICT in education and training has become a priority during the last decade. ICT to support and change the teaching and learning process in many subject areas. ICT has positive impact on student's performances in primary schools particularly in English. Schools With sufficient ICT resources achieved better results than those that are not well equipped. There is a significant improvement on learner's performances. Finally teachers become more convinced that educational achievements are due to good ICT use. Students also assume responsibilities when they use ITC to organize their work through digital. ICT also help teachers to work in teams and share ideas related to schools curriculum. There is also evidence evidence that broadband and interactive white boards play a central role in fostering teacher's communication and increasing collaboration between educators. Teachers reported that the relationship between teaches and learns is sometimes reversed with regards to information technology many teachers mentioned that they had students show them how to use technology. One teacher commented that when students could help teachers, it gave students a big confidence boost some teachers went as far as to use terms like "co-learners" to describe the new relationship between teachers and students

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கற்றல் கற்பித்தல் உத்திகள்

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முன்னுரை

கற்றல் என்பது அனைத்து உயர் விலங்குகளிலும் காணப்படும் ஒரு செயல். குறிப்பாக உயர் உயிரியான மனிதனிடம் காணப்படும் மிகவும் முக்கியமான ஒரு செயலாகும். உளவியலில் வளர்ச்சி/கற்றல்/பொருத்தப்பாடு மூன்றும் மையப் பொருள்கள். வளர்ச்சியின் விளைவாக கற்றலுக்கேற்ற முதிர்ச்சியும் ஆயத்த நிலையும் தோற்றுவிக்கப்படுகின்றன. பொருத்தப்பாட்டினைப் பெற்று நல்வாழ்க்கை வாழ கற்றல் ஒருவனுக்கு உதவுகின்றது. இவை மூன்றும் ஒன்றுடன் ஒன்று நெருங்கிய தொடர்புடையன. இது எல்லா உயர் உயிர்களிடமும் காணப்படும் ஒரு திறன். அறிவு பெற நல்ல நடத்தை அமைய அடிப்படை கற்றலாகும்.

கற்றல் என்பதன் பொருள்

கற்றல் என்பது பயிற்சி/அனுபவங்கள் ஆகியவற்றின் அடிப்படையில் ஒருவனிடம் ஏற்படக்கூடிய ஓரளவு நிலையான/முழுமையான நடத்தை மாற்றத்தை குறிக்கும்.

கற்றலை அனுபவங்களில் இருந்து நாம் பெறும் படிப்பினை/விளைபயன் என்றும் அழைக்கலாம்.

கற்றல் என்பது ஒருவன் தன் வாழ்வில் அறிவு, பழக்க வழக்கங்கள், மனப்பான்மைகள், செயல்திறன்கள் ஆகியவற்றைப் பெறுகின்ற நிலையினைக் குறிக்கும். மனித நடத்தைக்கு அடிப்படையாக கற்றல் அமைகிறது. கல்வி கற்பதற்காக குழந்தைகள் பள்ளிக்குச் செல்கிறார்கள். பள்ளியில் தமிழ், கணிதம், சூழ்நிலையியல் போன்ற பாடங்கள் மூலமாக செய்திகளை தெரிந்து கொள்கிறார்கள். அபிநயத்துடன் கூடிய பாடல்களைப் பாடவும் புதிய விளையாட்டுகளை விளையாடவும் தெரிந்து கொள்கிறார்கள். வீட்டில் இருக்கும் வரை அண்டை வீட்டுக் குழந்தைகளுடன் சண்டை போட்டவர்கள், பள்ளியை விட்டுத் திரும்பும்போது கைகோர்த்துக் கொண்டு மகிழ்ச்சியாக வருகிறார்கள். இதைப்பார்க்கும் கற்றல் நடைபெற்றுள்ளதாக கருதுகிறார்கள். இத்தகைய கற்றல் நடைபெற்றுள்ளதாக கருத வேண்டுமாயின்,

- குழந்தைகளின் சிந்தனை மற்றும் செயல்பாடுகள் முன்பிருந்ததை விட புதியதாக இருத்தல் வேண்டும்.
- இம்மாற்றத்திற்குக் காரணமாக இருப்பது குழந்தைகள் பெற்ற புதிய அனுபவமாக இருத்தல் வேண்டும். அனுபவம் என்பது வகுப்பறையில் ஆசிரியர் கூறுவதை திரும்பக் கூறல், புத்தகம் வாசித்தல், பாடல் பாடுதல், விளையாடுதல் போன்றவற்றில் பயிற்சி பெறுதல், பிற மாணவர்களின் செய்கைகளை உற்று நோக்கல் முதலியவற்றால் அமைவதாகக் கருதப்படுகிறது.
- இம்மாற்றமானது நிலையானதாக இருத்தல் வேண்டும் என உளவியல் அறிஞர்கள் கூறுகின்றனர். எனவே கற்றல் எனப்படுவது ஒரு மனிதன்

தன் வாழ்க்கையில் சந்தித்த நேரடி அனுபவங்கள் மூலமாக அவனின் நடத்தையில் சிறிதேனும் முழுமையாக ஏற்படும் மாற்றமாகும்.

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கற்றலின் இயல்பு

கற்றலின் முக்கிய இயல்புகளாவன :

- கற்றல் அனைத்து உயிரிகளிடமும் காணப்படுவது
- கற்றல் தொடர்ச்சியானது
- கற்றலால் நடத்தை செம்மையுறுகிறது.
- கற்றல் என்பது பிறரால் அளிப்பது அன்று. சுய அனுபவங்கள் வாயிலாக ஒவ்வொருவரும் முயன்று அடைவது.
- கற்றல் பன்முகம் கொண்டது.
- கற்றல் என்பது படிப்படியாக/தொடர்ச்சியான ஓர் செயல். படிநிலைகளில் ஏற்படக்கூடியது.
- கற்றல் உள உடல் செயல்களை உள்ளடக்கியது.
- சுய அனுபவமும்/பெறப்படும் அனுபவமும் கற்றலுக்கான வழிகள்.
- கற்றல் அகநிலை/புறநிலைக் காரணிகளின் தாக்கமுடையது.
- கற்றல் முடிவுற்றது – தொடர்ந்து நிகழ்வது. மேம்பாடு என்பது கற்றலின் விளைவு.

தாய்மொழி கற்பித்தலின் நோக்கங்களும், கற்பித்தலும்

- அடிப்படைத் திறன்களை வளர்த்தல்
- எண்ணங்களை வெளியிடல்
- சிந்தனையை வளர்த்தல்
- அனுபவங்களை வெளியிடல்
- தொழில் வளர்த்தல்
- கற்பிக்கும் வாயிலாக அமைதல்
- அறிவுக் களஞ்சியமும், சொற் களஞ்சியமும்
- கற்பனையும், படைப்பாற்றலும்
- அழகுணர் ஆற்றல்
- சமூகப் பண்பாட்டை அறிதல்
- நாட்டுப் பற்றும் மொழிப்பற்றும்
- கல்வியின் இன்றியமையாயையும், சூழ்நிலையின் குறைகளையும் அறிதல்
- வாழ்க்கை நடத்த தேவையான திறன்களைப் பெறுதல்
- மொழியின் முக்கியத்துவம்

கற்றலின் முக்கியத்துவம்

மற்ற உயிரினங்களோடு ஒப்பிடும்போது மனிதன் அதிகமான நுண்ணறிவைப் பெற்றுள்ளான். நேரடி அனுபவம் பெறாமலேயே பிறர் கூறுவதைக் கேட்டுப்பிந்து கொள்ளும் பண்பைப் பெற்றுள்ளான் பிறந்தது முதல் இறக்கும் வரை கற்கின்றான். கருவில் துவங்கி கல்லறை வரை கற்கின்றான். கற்றல் இல்லையேல் வாழ்வு மனிதனிடம் இல்லை. கற்றல் தனிமனிதனின் வாழ்வில் அதிகம் முக்கியத்துவம் பெற்றுள்ளது.

- கற்றலானது இயற்கையாக நிகழும் வளர்ச்சி.
- தனிமனிதனின் வாழ்வில் கற்றலை தவிர்க்க முடியாது.
- கற்றலின் வளர்ச்சியை அனுபவங்கள் மூலம் அதிகரிக்கலாம்.
- சூழ்நிலைக்கு ஏற்ப தன்னை தானே மாற்றிக் கொள்ள உதவுவது கற்றலே.
- கற்றலின் மூலம் குழந்தைகள் வகுப்பறையில் அனைவருடனும் ஒத்துப்போக வைக்கலாம்.
- கற்றலினாலே நடத்தை மாற்றம் ஏற்படுகின்றது.
- கற்றல் மூலம் அறிவு வளர்ச்சி ஏற்படுகின்றது.
- கற்றல் மூலமே புதிய நடத்தை தோன்றுகின்றது.
- பிரச்சனைக்கு தீர்வு காணும் திறன் வளர்க்க கற்றல் அவசியம்.
- செயல்திறன் வளர்க்க செய்திறனில் மேம்பட
- நுண்ணறிவு வளர்த்திட
- ஆளுமைப் பண்புகள் பெற்றிட
- திறன்கள் வளர்க்கப்பட
- வேறுபடுத்தும் திறன் பெற்றிட
- சமூக பண்புகள் பெற்றிட

கற்றலைத் தூண்டும் காரணிகள்

கற்றல் என்பது அனைத்து உயிரினிடத்தும் நடைபெறும் ஒரு செயலாகும். ஆனால் மனிதக் கற்றல் மற்ற உயிரினிடத்திலிருந்து மேம்பட்டதாகும். எனினும், அனைத்து மனிதர்களிடமும் கற்றல் ஒரே மாதிரி ஏற்படுவதில்லை, வேறுபடுகிறது. பல காரணிகள் கற்றலை தூண்டுகிறது. அவை,

- சூழ்நிலை
- பயன்பாடு
- கற்கும் பொருளின் தன்மை
- கற்றல் சூழல்
- முதிர்ச்சி
- ஊக்குவித்தல்
- கற்கும் நிலை
- கவனம்
- கற்கும் திறன்
- நினைவாற்றல்
- கற்பிக்கும் முறை
- கற்றலின் முன்னேற்றம் பற்றிய அறிவு

1. சூழ்நிலைத் தேவை :

கற்றலில் தனிநபர் வேறுபாடுகள் முக்கிய இடம் பெற்றாலும் பல அக, புற காரணிகள் கற்றல் அளவை/கற்றல் வேகத்திறனை/கற்றலின் அடைவினைத் தீர்மானிக்கின்றன.

கற்றலுக்கான தேவை அதிகமிருக்குமானால் கற்றல் வேகம் தூண்டப்படுகின்றது. தேவையற்றவைகளை கற்பதில் வேகம் குறைகின்றது.

எடுத்துக்காட்டு : தேர்விற்கு முதல் நாள் கற்றலின் வேகத்திறன் கூடுகிறது.

2. பயன்பாடு :

கற்றலின் உடனடி பயன்பாடு இருந்தால் கற்றலின் பயன் அதிகமாகும் பொழுது கற்றல் வேகமும் கூடுகின்றது. பயன் குறையுமானால் மிதமான கற்றலே நிகழ்கிறது.

3. கற்கும் பொருளின் தன்மை :

கற்கும் பொருள் கவர்ச்சியானதாயின் விரைவாகக் கற்கப்படுகின்றன. கவர்ச்சியற்றவை கற்பவரை ஈர்ப்பதில்லை. கற்கும் பொருளின் தன்மைக்கேற்ப கற்றலின் போக்கு அமைகின்றது. கற்றல் பொருளின் தன்மை, பயன்பாடு ஆகியவையும் கற்றலைத் தீர்த்தானிக்கின்றன. எளியவை விரைவில் கற்கப்படுகின்றன. பயனுள்ளவையும் விரைவில் கற்கப்படுகின்றன. கடினமானவை மெதுவாகக் கற்கப்படுகின்றன.

4. கற்றல் சூழல் :

சுதந்திரமாகக் கற்பது கற்றலைத் தூண்டும் மட்டுமன்று செயல்படும் சூழலும் கற்றலை மேம்படுத்தும். கற்றல் சூழ்நிலை சாதகமாக இருப்பின் வகுப்பறைச் சூழல் நன்கு அமைந்திருப்பின் சமூகச் சூழல் சுமுகமானதாக இருப்பின் கற்றல் திறன் மேம்படும். சுதந்திரமாகச் சிந்தித்து செயல்பட வாய்ப்பளிக்கப்படும் பொழுது கற்றல் அதிகரிக்கின்றது.

5. முதிர்ச்சி :

கற்பவரின் மனவளர்ச்சி, உடல் வளர்ச்சி, முதிர்ச்சி ஆகியவையும் கற்றலில் தாக்கமுடையன. முதிர்ச்சி நன்கு ஏற்பட்டிருந்தால் கற்றல் அளவும், வேகமும், விளைவும் நன்கு அமையும். முதிர்ச்சியும் ஊக்குவித்தலும் இணைந்து செல்லுதல் வேண்டும்.

6. ஊக்குவித்தல் :

மேக்கோணல் என்பவர் கருத்தின்படி கற்றலுக்கு ஓர் உந்துதல் அவசியம். ஊக்குவித்தல் கற்றலுக்கு இன்றியமையாத ஒரு காரணியாகும். அனிலிசிரா கருத்தின் படி எந்த ஒரு செயலுக்கும் ஊக்கி அவசியம். ஊக்கி இல்லாத ஒரு செயலின் வெற்றி குறைவு. எனவே கற்றலுக்கும் மாணவரை பெற்றோர், கற்பிக்கும் ஆசிரியரும் வகுப்பறை செயல்கள் இவை இரண்டிற்கும் ஊக்கிகள் அவசியமானதாகும்.

ஊக்குவித்தல் எனப்படுவது ஒரு தேவையை நிறைவு செய்ய நம்மை முயலத்தூண்டும் நம்முள்ளிலிருந்து ஏழும் உந்துதலாகும். இந்த ஊக்கியே மனிதக்கற்றலைத் தொடங்குவதற்கு வழிகாட்டியாக அமையும். தேவை, விருப்பம், ஆர்வம் ஆகியவை ஊக்கத்தின் காரணிகளாகும்.

7. கற்கும் நிலை :

திறம்படக் கற்றலுக்கு கற்கும் நிலை முக்கியமானதாகும். குறுக்கீடற்ற/திணிக்கப்படாத சுயசிந்தனை வாய்ப்பும் செயலுற்ற கற்றலும் பகுப்புச் சிந்தனையும், விரி சிந்தனையும், கற்றலை சிறப்பானதாக்கும்.

8. கவனம் :

கவனம் ஒரு முக்கிய காரணி கவனத்திற்கான காரணிகள் சாதகமாக அமைந்தால் கவனித்தல் நன்கு அமையும். கவனித்தல் நன்கு அமைந்தால் கற்றலும் சிறப்பாக அமையும். புலன்காட்சித்திறன், கற்ற கருத்துக்களைப் பொருத்தமாக ஒருங்கிணைக்கும் திறன் கற்றலை மேம்படுத்து வனவாகும்.

9. கற்கும் திறன் :

தனிநபர் வேறுபாடுகளுக்கேற்ப கற்கும் திறனும் வேறுபடும். தனிநபர் கற்பித்தல் முறைகள் கற்கும் திறனை தூண்டுவனவாகும். அதுமட்டுமன்று ஒப்பந்தங்கள், ஒப்படைப்புகள் கற்றலை தூண்டுவன.

10. நினைவாற்றல் :

கற்றலை பாதிக்கும் காரணி மறதி. ஆனால், கற்றலை தூண்டும் காரணி நினைவாற்றல்/மறக்காத்திருத்தலாகும். நினைவாற்றல் கற்றலை நீண்ட நாட்களுக்கு தக்க வைத்துக் கொள்ள முடிகிறது.

11. கற்பிக்கும் முறை :

கற்பவருக்கு சலிப்பு ஏற்படாத வகையில் ஊக்குவிக்கின்ற வகையில் பயனுள்ள வகையில் மாணவர்க்கு ஆர்வத்தினை தூண்டும் வகையில் அமைக்கப்படும் கற்பித்தல், புதுமை முறையிலான கற்பித்தல், காட்சி கேள்வி துணைக்கருவிகளின் உதவியுடன் நடைபெறும் கற்பித்தல் முறைகள் கற்றலை வலுப்படுத்தும். வாழ்க்கை நிலைகளுக்கு ஏற்ப கற்றல் அனுபவங்கள் அளிக்கப்படும் பொழுது கற்றல் பயனுள்ளதாக அமையும்.

12. கற்றலின் முன்னேற்றம் பற்றிய அறிவு :

கற்றலில் எழும் முன்னேற்றம், கற்றலில் வெற்றி இவை பற்றிய உடனடிப் பின்னூட்டம் கற்றலை ஒருங்கமைக்க, சரியான திசையில் எடுத்துச் செல்ல துரிதப்படுத்த, நிலைப்படுத்த உதவக்கூடியன.

வலுப்படுத்துதல், புலன் காட்சித்திறன் ஆகியவைகளும் கற்றலை வலுப்படுத்துகின்றன. சிக்கனமாகக் கற்கும் முறைகள் கற்றலைச் சிறப்பாக்குகின்றன. கற்றலில் வெற்றிபெரும் பொழுது வலுப்படுத்துதல் பயன்படுத்தும் பொழுது கற்றல் சிறப்படைகின்றது.

முடிவுரை

அறிந்து கொள்ளுதல், புரிந்து கொள்ளுதல், பகுத்தல் கண்டுணர்தல் போன்ற அறிவு சார்ந்த செயல்களுக்கும், கற்றலுக்கும் உள்ள தொடர்பினைத் தெரிந்து கொள்வதின் பின்வந்த ஆராய்ச்சியாளர்கள் ஆர்வம் காட்டத் தொடங்கினர். அதன் விளைவாக அறிவு சார்ந்த கற்றல் கொள்கை உருவானது.

கற்றல் கற்பித்தல் மற்றும் செயல்பாடுகள்

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குறிப்புச்சட்டகம்

- முன்னுரை
- கற்றல்
- கற்றல் வகைகள்
- கற்றலின் பயன்கள்
- கற்பித்தலில் ஆசிரியர் அறிந்து கொள்ள வேண்டிய வழிமுறைகள்
- முடிவுரை

முன்னுரை:

‘கற்க கசடற கற்பவை கற்றபின்
நிற்க அதற்கு தக”

கற்றல் நம்மோடு நில்லாது பிறருக்கும் பயன்தர வேண்டும். கற்றல் அழியாச் செல்வம். அதனை பிறருக்கு கற்றுக்கொடுப்பதன் வாயிலாக கற்றல் அறிவு பெருகும், குறைவுபடாது. கற்றல் கற்பித்தலை கீழ்கண்ட முறைகளில் மாணவர்களுக்கு தெளிவுரை செய்யலாம்.

கற்றல்:

உடல் வளர்ச்சியில் முதிர்ச்சி பெற்ற பின்தான் குழந்தைகளால் கல்வி கற்க இயலும். குழந்தைகளுக்கு ஓடி, விளையாட பயிற்றி கொடுக்க வேண்டுமாயின் நரம்பு, எலும்பு, தசை ஆகியவற்றின் வளர்ச்சி வயதிற்கேற்ற முதிர்ச்சி பெற்றிருக்கவேண்டும்.

கற்றல் வகைகள்:

உயிருள்ளவற்றின் சிறப்புப் பண்பு கற்றலாகும். மனிதனது கற்றல் திறன் உயர்நிலைப்பட்டதாகும். மனிதன் கடினமானவற்றையும், சிக்கல் மிகுந்தவற்றையும், கருத்துக்கள் தொடர்புடையவற்றையும் வாழ்நாள் முழுவதும் கற்கிறான்.

வாய்மொழிக் கற்றல்:

நாம் பேசும் மொழி, செய்தித் தொடர்புகள் போன்றவை வாய்மொழிவழிக் கற்றலுக்கு சிறந்த எடுத்துகாட்டுகள் ஆகும். பள்ளிக் குழந்தைகள் வாய்விட்டு படிப்பதை மனப்பாடம் செய்வதையும் இவ்வகை கற்றலில் சேர்க்கலாம். இதில் சைகைகள், படங்கள், குறியீடுகள், உருவங்கள், ஒலிகள், பேச்சுக்கள், போன்றவை வாய்மொழிக் கற்றலுக்கு ஏதுவாய் அமையும்.

இயக்க கற்றல்:

அனைத்து வகை இயக்கத் திறன்களைக் கற்றுக்கொள்ளுதல் இவ்வகைக் கற்றலைச் சாரும். நீந்துதல், குதிரை சவாரி, வாகனங்களை இயக்குவது, இசைக்கருவிகளை மீட்டுவது பலவித கருவிகளை இயக்குவது, அறிவியல்

சோதனைகள் செய்வது, கணித வரைபடங்களை வரைதல், கூட்டல் பெருக்கல் போன்றவை இவ்வகை கற்றலில் அடங்கும்.

பொதுமைக் கருத்துச் சார்ந்த கற்றல்:

மனிதர்கள், பொருள்கள் மற்றும் நிகழ்வுகளைப் பற்றிய பொதுவான எண்ணங்களை மனதில் உருவகித்துக் கொள்வதை பொதுமைக் கருத்துச்சார்ந்த கற்றல் என்று கூறுகின்றோம். மரங்களில் பல வகைகள் இருந்தாலும், மரம் என்ற பொதுமைக் கருத்தினில் அவை அனைத்தும் அடங்கிவிடுகின்றது. அக்கற்றல் ஒரு அறிவு சார்ந்த கற்றலாகும்.

பிரச்சினையைத் தீர்த்தல்:

பிரச்சினையைத் தீர்த்தல் ஓர் உயர்வகைக் கற்றலாகும். இவ்வகைக் கற்றலில் காரணம் அறிதல், சிந்தித்தல், உற்றுநோக்குதல், பிரித்தறிதல், பொதுமைப்படுத்துதல், கற்பனை செய்தல், முடிவை எட்டுதல், புதிய வழியில் முயற்சித்தல், பரிசோதனை செய்து சரிபார்த்தல் போன்ற திறன்கள் அடங்கும். பழைய அனுபவங்கள், பயிற்சிகள், முறைசார்ந்த மற்றும் முறைசாரா கற்றல் பெற்றிருக்கும் கல்வியறிவு, பழக்கங்கள், மனப்பான்மைகள், ஆர்வங்கள், கற்ற தொகுப்புகள் போன்றவற்றை அடிப்படையாகக் கொண்டு ஒருவனை தெரியாத புதிய இலக்கை எட்டுவதற்கு ஊக்குவிப்பதன் மூலம் அவனை பிரச்சனைகளைத் தீர்ப்பதில் வல்லவனாக்க முடியும்.

தொடர் கற்றல்:

கற்போருக்கு திட்டமிடப்பட்ட படிநிலைகளை அமைத்து வயதிற்கும் மனதிற்கும் ஏற்ற வகையில் கற்றல் பொருள்கள், கருவிகளை வரிசைப்படுத்திக் கொடுத்து கற்ற உதவுதல் தொடர் கற்றலை உருவாக்கும். தற்பொழுது நடைமுறையிலுள்ள செயல்வழிக் கற்றல் தொடர் கற்றலாகும்.

இணைத்துக் கற்றல்:

இணைத்துக் கற்றல் அன்றாட கற்றலில் முக்கியத்துவம் பெறுகிறது. தாய்மொழிக் சொற்களுடன் பிறமொழிச் சொற்களை இணைத்துக் கற்பதால் பிறமொழிகளை எளிதாகக் கற்க முடிகிறது. இவ்வகை கற்றலின் மூலம் மொழியறிவு வளர்ச்சிக்குத் தேவைப்படும் சொல்லாட்சித் திறன், இலக்கணம், பேச்சுத்திறன், எழுத்துத்திறன் போன்றவற்றை எளிதில் பெறலாம்.

பின்பற்றிக் கற்றல்:

நம் அன்றாட வாழ்வில் பின்பற்றிக் கற்றல் முறைசார்ந்த முறையிலும், முறைசாரா முறையிலும் நடைபெற்ற வண்ணமுள்ளது. சமூக வளர்ச்சி, மனவெழுச்சி வளர்ச்சி, பண்பாட்டு வளர்ச்சி, மொழி வளர்ச்சி, இயக்கத்திறன் வளர்ச்சி போன்றவை பெரிதும் பின்பற்றிக் கற்றல் மூலம் நடைபெற்று வருகிறது என்பது உண்மை.

கற்றலின் பயன்கள்:

கல்வி கற்பதற்காக குழந்தைகள் பள்ளிக்குச் செல்கிறார்கள். பள்ளியில் தமிழ், கணிதம், சூழ்நிலையியல் போன்ற பாடங்கள் மூலமாகச் செய்திகளைத் தெரிந்து கொள்கிறார்கள். அபிநயத்துடன் கூடிய பாடல்களை பாடவும், புதிய விளையாட்டுக்களை விளையாடவும் தெரிந்து கொள்கிறார்கள். வீட்டில் இருக்கும் வரை அண்டை வீட்டுக் குழந்தைகளுடன் சண்டை போட்டவர்கள், பள்ளியை விட்டுத் திரும்பும் போது கைகோர்த்துக் கொண்டு மகிழ்ச்சியாக வருகிறார்கள். இதைப் பார்க்கும் பெற்றோர்கள் தம் குழந்தைகளிடம் ஏற்பட்டுள்ள இம்மாற்றங்களைக் கண்டு கற்றல் நடைபெற்றுள்ளதாக கருதுகிறார்கள்.

கற்பித்தலில் ஆசிரியர்கள் அறிந்து கொள்ள வேண்டிய வழிமுறைகள்:

- கற்பிப்பதற்கு முன் ஆசிரியர் தன் மாணவர்கள் பற்றி இயல்புகளைத் தெரிந்து வைத்திருக்க வேண்டும்(குழந்தைகள் குழவிப்பருவம், பிள்ளைப் பருவம், குமரப்பருவம் ஆகியவகளை கடக்கும்போது அந்தந்த பருவத்திற்கான இயல்புகளை அறிந்து அவைகளைக் கற்பித்தல் முறைகளில் பயன்படுத்தி, தேர்வு செய்யப்பட்ட கல்வி இலக்குகளை அடையும் வண்ணம் மாணவர் நடத்தையை உருவாக்க கல்வி உளவியல் ஆசிரியருக்கு உதவுகிறது)
- வகுப்பறைக் கற்பித்தலில் மாணவர்க்கு ஊக்கம் அளித்திடும் வழிமுறைகளையும் (Methods of Motivation) மாணவர்களின் கவனத்தை ஈர்க்கும் அக, புறக் காரணிகளை அறிந்து அவற்றை பயன்படுத்தியும், கவனக்குறைவுக் காரணிகளை அறிந்து அவற்றை அகற்றியும் மாணவர்களது கவனத்தைப் பாடத்தில் நிலைவுறுத்தும் வழிமுறைகளை ஆசிரியர் அறிந்திருந்தால் மட்டுமே ஆசிரியர் தனது வகுப்பறைக் கற்பித்தலில் திறன் மிக்கவராகத் திகழ முடியும்.
- மாணவர்களது நாட்டங்களை அறிந்து ஊக்குவிக்கவும்.பரிசு, பாராட்டு, தண்டனைகளை முறையாகச் செயல்படுத்தி விரும்பத்தக்க கற்றலை மட்டும் வலுப்படுத்தும் வழிமுறைகளை ஆசிரியர் அறிந்திருப்பாரேயானால் அவர் எல்லோராலும் பாராட்டப்படும் ஆசிரியராகத் திகழ்வார்.
- மாணவர்களுக்கிடையே காணப்படும் பல்வேறு தனியாள் வேறுபாடுகளையும் அவற்றிற்கேற்ப அவரவர் தேவையை நிறைவு செய்யும் வண்ணம் கற்பித்தல் முறைகளை ஆசிரியர் தேர்தெடுக்கவும் கல்வி உளவியல் துணைபுரிகிறது.
- மாணவர்களது வளர்ச்சி நிலைகளுக்கேற்பவும், அந்தந்த வளர்ச்சி நிலையிலுள்ள மாணவர்களின் கற்றல் போக்குகளுக்கேற்பவும், சமூகத் தேவைகளின் மாறுதல்களுக்கேற்பவும், பாடப்பொருள்ளைத் தேர்ந்தெடுத்து வரிசைப்படுத்தவும் கல்வி உளவியல் உதவுகிறது.
- மாணவர்களின் கல்வி அடைவை மதிப்பிட உளவியல் அடிப்படையிலான பல்வேறு சோதனைகளை செயல்படுத்தி அளவீடுகளைப் பெற்று பொருள் உணர ஆசிரியர்களுக்குத் கல்வி உளவியல் அறிவு பெரிதும் துணை புரிகிறது.
- மாணவர்களது மனப்பான்மைகளைச் சீர்படுத்தவும். நடவடிக்கைகள் மூலம் மாணவர்களது நடத்தையை மேம்படுத்தி ஆளுமை வளர்ச்சிக்கு திட்டமிடும் வண்ணம் பல்வேறு பாடத்துணைச்

செயல்களை அமைத்திடவும் கல்வி உளவியல் வகுப்பறை ஆசிரியருக்குப் பெரிதும் துணை புரிகிறது.

- மாணவர்களது பொருத்தப்பாடற்ற நடத்தையைக் கண்டறிந்து அதற்கான காரணங்களை இனம் கண்டு நீக்கி, ஆளுமை வளர்ச்சியைச் செம்மைபடுத்த கல்வி உளவியல் உதவுகிறது.
- வகுப்பறை ஒழுங்கை நிலை நாட்டவும், மாணவர்களது மனநலத்தை மேம்படுத்தவும், பிரச்சினைக்குரிய மாணவர்கள் தங்களது பிரச்சினைக்குத் தீர்வு காண வழிகாட்டவும், அறிவுரை பகரவும், கல்வி உளவியல் பயன்படுகிறது.

முடிவுரை:

முடிவுரை எழுதும் அளவிற்கு கற்றல் கற்பித்தல் முடிவடையும் செயல் அல்ல. “அள்ள அள்ள திகட்டாத அமுது கற்றல்” நல்ல ஆசிரியர் ஒருவர் தம் மாணவர்களுக்கு எவ்வாறு சிறப்பாகக் கற்பிக்க வேண்டும் எனத் தெரிந்திருந்தால் மட்டும் போதாது அவர் தம் கற்பிக்கும் துறையில் நல்ல புலமை உடையவராக இருத்தல் வேண்டும்.

“நாமும் கற்போம் பிறருக்கும் கற்பிப்போம்”

உயர்கல்வி மேம்பாடு

பா.மாரியம்மாள்.

முனைவர் பட்ட ஆய்வாளர், ம.தி.தா. இந்துக்கல்லூரி , பேட்டை.10.

முன்னுரை:

கல்வி கண்ணானது, காலத்தினைவிடச் சிறந்தது, கடல்போன்றது, கறை அற்றது, கரைகளும் அற்றது, ஆசிரியர்களைப் பணிந்து பெறவேண்டியது. மனிதன் அறிவைப்பெற, பண்பைப்பிரிய, வாழ்க்கை முறையை அறிய, நல்ல குடிமகனாக வாழ கல்வி சுயவரம் போன்றது எனலாம்.

ஆசிரியர் இன்று ஏங்கினாலோ, தேங்கினாலோ, நாளை நாடு தூங்கிவிடும் என்கிறார் பேரறிஞர் அண்ணா. அண்ணாவின் கருத்தினைப் பின்பற்றிக் கல்வியாளர் ஜான்லூயி ஆசிரியர் இனத்தைத் தூக்கத்திலிருந்து விழிப்படைய குரல்கொடுத்து உயர்கல்வி சிறப்பாக அமைந்திட வழிவகுக்கிறார்.

தற்காலக் கல்வி:

கல்வி கற்பித்தல் என்பது மாபெரும் இயக்கம் எனலாம். காலத்திற்கு ஏற்ப கல்வியின் நோக்கமும், உள்ளடக்கமும், குறிக்கோளும் மாறும். வில் வித்தையை மறந்துவிட்டுக் குழந்தைகளுக்கு கம்ப்யூட்டர் கல்வியினைப் போதித்து, ஆங்கிலக் கல்வியினை வலியுறுத்துவது காலத்தின் கட்டாயம். கல்வியின் நோக்கமும், உள்ளடக்கமும் காலத்திற்கேற்ப மாறுதல் என்பது இயல்பே.

நம்நாடு அறிவியலில் கண்ட புரட்சிகளினாலும், நாகரீக பாதிப்பாலும் புதுமையின் கவர்ச்சியாலும், அலைக்கழிக்கப்பட்டு நிலைதடுமாறி திக்குத் தெரியாமல் நிற்கிறது. நம் நாட்டுக்கு கல்வி அமைப்பு மாணவர்கள், பெற்றோர்கள், ஆசிரியர்கள் ஆகியோரிடம் உள்ளன.

கல்வி அமைப்பு :

ஒரு சராசரி இந்தியனை உருவாக்குவதே நமது கல்வித்திட்டத்தின் முக்கியமான அம்சமாகிவிட்டது. கூழாங்கற்களைத் தேய்த்து பளிச்சிட வைக்கிறோம் ஆனால் ஆசிரியரைத் தேடிவரும் வைரங்களான மாணவர்களை மங்கவைத்து விடுகிறோம் என்கிறார் இங்கர்சால்.

இன்றைய ஆசிரியர்கள் நிலை:

ஆசிரியர்பணி பொருப்பு மிகுந்தது. புனிதமானது. ஈடு இணையற்றது. இத்தகைய ஆசிரியர்கள் இன்று தொழிலதிபர்களாக, அரசியல்வாதிகளாக வாழ்கிறார்கள்.

ஆசிரியர்கள் தங்கள் அறிவை வளர்த்திட கம்பன், தேவாரம், திருவாசகம், திருக்குறளை ஆழ்ந்து படித்துத் தெளிவுபெற்றோர் யாரும் இல்லை. ஆசிரியர்களில் பெரும்பாலோர் மாணவர் நலனில் அக்கறை காட்டுவதில்லை.

கல்வித்துறை

மாணவர்களின் கல்விமேம்பாட்டிற்காக குறைந்தபட்சக் கற்றல் திறனை நம் குழந்தைகள் பெற என்னென்ன வழிவகைகள் இருக்கின்றன என கல்வி நிர்வாகம் சிந்தித்திட வேண்டும்.

உடற்பயிற்சித்திட்டம், ஓவியம், கைவினை, சினிமா, அரசியல் என்பன மாணவர்களுக்கு அரசியல் சாசனத்தின் மக்களாட்சித் தத்துவத்திற்கும், சமத்துவக் கண்ணோட்டத்திற்கும், புறம்பான செயல்கள் என்பர்.

கல்விபடும்பாடு

வள்ளுவர் வகுத்த வழியைப் பின்பற்ற மனித சமுதாயத்திற்கு தரம், தகுதி, பொருளாதார வசதி வேண்டும். வறுமையின் காரணமாக தொழிற்சாலைக்கு குழந்தைகள் சிறுபருவத்திலேயே வேலைக்குச் சென்று மனிதப்பிறப்பை பாழ்படுத்தி வருகின்றனர்.

தாய்மொழிக்கல்வி

தமிழ் ஓர் அழகானமொழி. வேறு எந்த மொழியினும் இல்லாத இலக்கியவளம் தமிழ்மொழிக்கு உண்டு. தொல்காப்பியரைப் பெற்ற நாகரீகமொழி. மேனிலைக்கல்விவரை தாய்மொழியே, தமிழே, கற்பிக்கும் மொழியாக இருக்கட்டும்

மகளிரும் வாழ்க்கைக்கல்வியும்:-

ஆண்களையும், பெண்களையும் சிறுபருவம் முதலே ஒன்றுசேர்ந்து வளர்க்கவேண்டும், உடல்நிலையிலும், சமுதாயநிலையிலும், உளவியல் நிலையிலும், ஆண்களைக்காட்டிலும் பெண் மிகவும் பாதிப்படைகிறாள் என அறிவுலகமேதை சிமோன் த பூவார் கூறுகிறார்.

கல்வியில் தேர்வு

நம் கல்வி அமைப்பே தேர்வுகளில் தேர்ச்சி பெறுவதையே இலட்சியமாகக்கொண்டு இயங்குகிறது. சிறப்பாக தேர்ச்சிபெற ஓராண்டுக் கல்வியை ஈராண்டில் பயிற்றுவித்தல், கேள்வி-பதில் மட்டும் படிக்கவைத்தல், நூறு சதவிகித தேர்ச்சிக்குப் பங்கம் விளைவித்தல், விடைத்தாள்கள் சரியாகத் திருத்தாமை என்ற நிலையில்தான் இன்றைய கல்வியின் கற்றல் நிலை உள்ளது.

ஆளுமையை வளர்ப்பதில் நுண்கலைக்கல்வியின் பங்கு

ஓவியம், குடிசைத்தொழில், உடற்பயிற்சி, ஆசிரியர்களின் பங்கு, என்பன கல்வி அமைப்பிற்கு ஏற்பட்ட மகுத்தான தோல்வி, மனிதநேயத்தைக் குலைக்கும், மனிதஉணர்வுகளை அழிக்கும், மனிதஇனத்தினைப் பிரிக்கும் எந்தச்செயலும் பாவச்செயல்களே.

ஆசிரியர் இலக்கு

ஒவ்வொரு பெற்றோரும் தங்கள் பிள்ளைகளின் மீது அதிக அன்பு கொண்டிருக்கின்றனர். ஆசிரியப் பெருமக்கள் தங்கள் தனித்தன்மையை காத்து, சமுதாயத்தின் ஆரவாரங்களிடையே தன்னைப்பறிக்கொடுக்காது, தற்காத்து இளைஞர் உலகை வழி நடத்திச் செல்லவேண்டும்.

முடிவுரை

கனவுகளை நனவாக்க மீண்டும் ஒரு முயற்சி எடுத்தாக வேண்டும். பிரபஞ்சத்தின் ஒரு துகளான நம்பூமியைச் சாறுபிழிந்து வடித்துக் குறுகிய மனிதவாழ்க்கையின் அஸ்தமனத்திற்குள் துடிப்புள்ள, இனிமையான, அழகிய நெஞ்சையள்ளும் அமுதநாதத்தின் ஓர் இழையையாவது ஒலிக்கச் செய்துவிட வேண்டும்.

Electronic Library

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INTRODUCTION:

A **digital library** is a special library with a focused collection of digital objects that can include text, visual material, audio material, video material, stored as electronic media formats (as opposed to print, microform, or other media), along with means for organizing, storing, and retrieving the files and media contained in the library collection. Digital libraries can vary immensely in size and scope, and can be maintained by individuals, organizations, or affiliated with established physical library buildings or institutions, or with academic institutions. The digital content may be stored locally, or accessed remotely via computer networks. An electronic library is a type of information retrieval system.

HISTORY:

Early projects centered on the creation of an electronic card catalogue known as Online Public Access Catalog (OPAC). By the 1980s, the success of these endeavors resulted in OPAC replacing the traditional card catalog in many academic, public and special libraries. This permitted libraries to undertake additional rewarding co-operative efforts to support resource sharing and expand access to library materials beyond an individual library.

An early example of a digital library is the Education Resources Information Center (ERIC) which was "born digital" in 1966.

TERMINOLOGY:

The term digital libraries was first popularized by the NSF/DARPA/NASA Digital Libraries Initiative in 1994. These draw heavily on Vannevar Bush's essay *As We May Think* (1945), which set out a vision not in terms of technology, but user experience. The term virtual library was initially used interchangeably with digital library, but is now primarily used for libraries that are virtual in other senses (such as libraries which aggregate distributed content). In the early days of digital libraries, there was discussion of the similarities and differences among the terms digital, virtual, and electronic.

In the context of the DELOS, a Network of Excellence on Digital Libraries, and DL.org, a Coordination Action on Digital Library Interoperability, Best Practices and Modelling Foundations, Digital Library researchers and practitioners and software developer produced a **Digital Library Reference Model** which defines a digital library as: "A potentially virtual organization, that comprehensively collects, manages and preserves for the long depth of time rich digital content, and offers to its targeted user communities specialized functionality on that content, of defined quality and according to comprehensive codified policies."

DIGITAL ARCHIVES:

Physical archives differ from physical libraries in several ways. Traditionally, archives are defined as:

1. Containing primary sources of information (typically letters and papers directly produced by an individual or organization) rather than the secondary sources found in a library (books, periodicals, etc.).
2. Having their contents organized in groups rather than individual items.
3. Having unique contents.

The technology used to create digital libraries is even more revolutionary for archives since it breaks down the second and third of these general rules. In other words, "digital archives" or "online archives" will still generally contain primary sources, but they are likely to be described individually rather than (or in addition to) in groups or collections. Further, because they are digital, their contents are easily reproducible and may indeed have been reproduced from elsewhere. The Oxford Text Archive is generally considered to be the oldest digital archive of academic physical primary source materials.

Archives differ from libraries in the nature of the materials held. Libraries collect individual published books and serials, or bounded sets of individual items. The books and journals held by libraries are not unique, since multiple copies exist and any given copy will generally prove as satisfactory as any other copy. The material in archives and manuscript libraries are "the unique records of corporate bodies and the papers of individuals and families".

THE FUTURE:

Large scale digitization projects are underway at Google, the Million Book Project, and Internet Archive. With continued improvements in book handling and presentation technologies such as optical character recognition and development of alternative depositories and business models, digital libraries are rapidly growing in popularity. Just as libraries have ventured into audio and video collections, so have digital libraries such as the Internet Archive. Google Books project recently received a court victory on proceeding with their book-scanning project that was halted by the Authors' guild. This helped open the road for libraries to work with Google to better reach patrons who are accustomed to computerized information.

According to Larry Lannom, Director of Information Management Technology at the nonprofit Corporation for National Research Initiatives (CNRI), "all the problems associated with digital libraries are wrapped up in archiving." He goes on to state, "If in 100 years people can still read your article, we'll have solved the problem." Daniel Akst, author of *The Webster Chronicle*, proposes that "the future of libraries — and of information — is digital." Peter Lyman and Hal Variant, information scientists at the University of California, Berkeley, estimate that "the world's total yearly production of print, film, optical, and magnetic content would require roughly 1.5 billion gigabytes of storage." Therefore, they believe that "soon it will be technologically possible for an average person to access virtually all recorded information."

SEARCHING:

Most digital libraries provide a search interface which allows resources to be found. These resources are typically deep web (or invisible web) resources since they frequently cannot be located by search engine crawlers. Some digital libraries create special pages or sitemaps to allow search engines to find all their resources. Digital libraries frequently use the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) to expose their metadata to other digital libraries, and search engines like Google Scholar, Yahoo! and Scirus can also use OAI-PMH to find these deep web resources.

There are two general strategies for searching a federation of digital libraries: distributed searching and searching previously harvested metadata.

SOFTWARE:

There are a number of software packages for use in general digital libraries, for notable ones see Digital library software. Institutional repository software, which focuses primarily on ingest, preservation and access of locally produced documents, particularly locally produced academic outputs, can be found in Institutional repository software. This software may be proprietary, as is the case with the Library of Congress which uses Digiboard and CTS to manage digital content.

DIGITIZATION:

In the past few years, procedures for digitizing books at high speed and comparatively low cost have improved considerably with the result that it is now possible to digitize millions of books per

year. Google book-scanning project is also working with libraries to offer digitize books pushing forward on the digitize book realm.

ADVANTAGES:

Traditional libraries are limited by storage space; digital libraries have the potential to store much more information, simply because digital information requires very little physical space to contain it.^[18] As such, the cost of maintaining a digital library can be much lower than that of a traditional library. A physical library must spend large sums of money paying for staff, book maintenance, rent, and additional books. Digital libraries may reduce or, in some instances, do away with these fees. Both types of library require cataloging input to allow users to locate and retrieve material. Digital libraries may be more willing to adopt innovations in technology providing users with improvements in electronic and audio book technology as well as presenting new forms of communication such as wikis and blogs; conventional libraries may consider that providing online access to their OP AC catalog is sufficient. An important advantage to digital conversion is increased accessibility to users. They also increase availability to individuals who may not be traditional patrons of a library, due to geographic location or organizational affiliation.

- **No physical boundary.** The user of a digital library need not to go to the library physically; people from all over the world can gain access to the same information, as long as an Internet connection is available.
- **Round the clock availability** A major advantage of digital libraries is that people can gain access 24/7 to the information.
- **Multiple access.** The same resources can be used simultaneously by a number of institutions and patrons. This may not be the case for copyrighted material: a library may have a license for "lending out" only one copy at a time; this is achieved with a system of digital rights management where a resource can become inaccessible after expiration of the lending period or after the lender chooses to make it inaccessible (equivalent to returning the resource).
- **Information retrieval.** The user is able to use any search term (word, phrase, title, name, subject) to search the entire collection. Digital libraries can provide very user-friendly interfaces, giving click able access to its resources.
- **Preservation and conservation.** Digitization is not a long-term preservation solution for physical collections, but does succeed in providing access copies for materials that would otherwise fall to degradation from repeated use. Digitized collections and born-digital objects pose many preservation and conservation concerns that analog materials do not. Please see the following "Problems" section of this page for examples.

DIGITAL PRESERVATION

Main article: Digital preservation

Digital preservation aims to ensure that digital media and information systems are still interpretable into the indefinite future.^{[20][21]} Each necessary component of this must be migrated, preserved or emulated. Typically lower levels of systems (floppy disks for example) are emulated, bit-streams (the actual files stored in the disks) are preserved and operating systems are emulated as a virtual machine. Only where the meaning and content of digital media and information systems are well understood is migration possible, as is the case for office documents. However, at least one organization, the Wider Net Project, has created an offline digital library, the e Granary, by reproducing materials on a 4 TB hard drive. Instead of a bit-stream environment, the digital library contains a built-in proxy server and search engine so the digital materials can be accessed using an Internet browser.

COPYRIGHT AND LICENSING

Digital libraries are hampered by copyright law because, unlike with traditional printed works, the laws of digital copyright are still being formed. The republication of material on the web by libraries may require permission from rights holders, and there is a conflict of interest between libraries and the publishers who may wish to create online versions of their acquired content for commercial purposes. In 2010, it was estimated that twenty-three percent of books in existence were created before 1923 and thus out of copyright. Of those printed after this date, only five percent were still in print as of 2010. Thus, approximately seventy-two percent of books were not available to the public.

METADATA CREATION:

In traditional libraries, the ability to find works of interest is directly related to how well they were cataloged. While cataloging electronic works digitized from a library's existing holding may be as simple as copying or moving a record from the print to the electronic form, complex and born-digital works require substantially more effort. To handle the growing volume of electronic publications, new tools and technologies have to be designed to allow effective automated semantic classification and searching. While full text search can be used for some items, there are many common catalog searches which cannot be performed using full text, including:

- finding texts which are translations of other texts
- differentiating between editions/volumes of a text/periodical
- inconsistent descriptors(especially subject headings)
- missing, deficient or poor quality taxonomy practices
- linking texts published under pseudonyms to the real authors (Samuel Clemens and Mark Twain, for example)
- differentiating non-fiction from parody (The Onion from The New York Times)

DISADVANTAGES:

- User authentication for access to collections
- Copyright
- Digital preservation (see above)
- Equity of access (see digital divide)
- Interface design
- Interoperability between systems and software
- Information organization
- Inefficient or non existent taxonomy practices (especially with historical material)
- Training and development
- Quality of Metadata

CONCLUSION:

A library must carefully consider the degree of risk that it wishes to undertake (e.g., whether it wants to stretch the limits of the law). The Library of Congress, for example, is likely to come under closer scrutiny than other institutions do, both by libraries and archives searching for guidance in their own preservation and dissemination programs and by right holders whose works are used without express authorization. The Library of Congress has traditionally been very cognizant of copyright rights in serving its patrons (it is, after all, home to the Copyright Office) and presumably will continue to be so.

A risk-management approach may provide a useful means of preserving or disseminating some works and a possible basis for moving forward with limited pilot programs to help determine the administrative, technical, and legal feasibility of digital preservation initiatives.

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Use of Multimedia And Animation In Teaching

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INTRODUCTION:

Multimedia is content that uses a combination of different content forms such as text, audio, images, animation, video and interactive content. Multimedia can be recorded and played, displayed, dynamic, interacted with or accessed by information content processing devices, such as computerized and electronic devices. Multimedia devices are electronic media devices used to store and experience multimedia content. Multimedia is distinguished from mixed media in fine arts; by including audio. The term “rich media” is synonymous for interactive multimedia. Hypermedia scales up the amount of media content in multimedia application.

Animation is the process of making the illusion of motion and change by means of the rapid display of a sequence of static images that minimally differ from each other. The illusion—as in motion pictures in general. Animators are artists who specialize in the creation of animation. **Educational animations** are animations produced for the specific purpose of fostering learning. Animation can be recorded with either analogue media, a flip book, motion picture film, video tape, digital media, including formats with animated GIF, Flash animations and digital video. To display animation, a digital camera, computer, or projector are used along with new technologies that are produced. Using animations help learners to understand. Images are displayed in a rapid succession, usually 24, 25, 30, or 60 frames per second.

HISTORY OF MULTIMEDIA AND ANIMATION:

The term *multimedia* was coined by singer and artist Bob Goldstein to promote the July 1966 opening of his "Light Works at L'Oursin" show at Southponton, Long Island. 'Light works' is the latest *multimedia* music-cum-visuals. In the late 1970s, the term referred to presentations consisting of multi-projected slide shows timed to an audio track. However, by the 1990s 'multimedia' took on its current meaning. In common usage, *multimedia* refers to an electronically delivered combination of media including video, still images, audio, text in such a way that can be accessed interactively. Some computers which were marketed in the 1990s were called "multimedia" computers because they incorporated a CD-ROM drive, which allowed for the delivery of several hundred megabytes of video, picture, and audio data.

During the 1910s, the production of animated short films, typically referred to as "cartoons" El Apostol (Spanish: "The Apostle") was a 1917 Argentine animated film utilizing cutout animation, and the world's first animated feature film. Computer animation has become popular since Toy story (1995), the first feature-length animated film completely made using this technique. In 2008, the animation market was worth US\$68.4 billion. Animation as an art and industry continues to thrive as of the mid-2010s, because well-made animated projects can find audiences across borders and in all four quadrants. Animated feature-length films returned the highest gross (around 52%) of all film genres in the 2004–2013 timeframe.

USAGE/APPLICATION OF MULTIMEDIA:

Multimedia finds its application in various areas including, but not limited to, advertisements, arts, education, entertainment, engineering, medicine, mathematics, business, scientific research and spatial temporal applications. Several examples are as follows:

CREATIVE INDUSTRIES: It use multimedia for a variety of purposes ranging from fine arts, to entertainment, to commercial art, to journalism, to media and software services provided for any of the industries.

COMMERICAL USES: Commercial multimedia developers may be hired to design for governmental services and nonprofit services.

ENTERTAINMENT AND FINE ARTS: Multimedia is heavily used in the entertainment industry, especially to develop special effects in movies and animations (VFX, 3D animation, etc.). Video games also use multimedia features.

EDUCATION: Multimedia is used to produce computer-based training courses (popularly called CBTs) and reference books like encyclopedia and almanacs. Edutainment is the combination of education with entertainment, especially multimedia entertainment.

JOURNALISM: Multimedia reporters who are mobile (usually driving around a community with cameras, audio and video recorders, and laptop computers) are often referred to as *mojos*, from *mobile journalist*.

ENGINEERING: Software engineers may use multimedia in computer simulations for anything from entertainment to training such as military or industrial training. Multimedia for interfaces is often done as collaboration between creative professionals and software engineers.

INDUSTRY: Multimedia is used as a way to help present information to shareholders, superiors and coworkers. Multimedia is also helpful for providing employee training, advertising and selling products all over the world via virtually unlimited web-based technology.

MATHEMATICAL & SCIENTIFIC RESEARCH: Multimedia is mainly used for modeling and simulation. For example, a scientist can look at a molecular model of a particular substance and manipulate it to arrive at a new substance.

MEDICINE: Doctors can get trained by looking at a virtual surgery or they can simulate how the human body is affected by diseases spread by viruses and bacteria and then develop techniques to prevent it. Multimedia applications such as virtual surgeries also help doctors to get practical training.

TECHNIQUES OF ANIMATIONS:

1. **TRADITIONAL ANIMATION:** It was the process used for most animated films of the 20th century. The individual frames of a traditionally animated film are photographs of drawings, first drawn on paper. To create the illusion of movement, each drawing differs slightly from the one before it. The animators' drawings are traced or photocopied onto transparent acetate sheets called *cels*, which are filled in with paints in assigned colors or tones on the side opposite the line drawings. The completed character *cels* are photographed one-by-one against a painted background by a rostrum camera onto motion picture film.
2. **FULL ANIMATION:** It refers to the process of producing high-quality traditionally animated films that regularly use detailed drawings and plausible movement, having a smooth animation. Fully animated films can be made in a variety of styles. Fully animated films are animated at 24 frames per second.
3. **LIMITED ANIMATION:** It involves the use of less detailed or more stylized drawings and methods of movement usually a choppy or "Skippy" movement animation. Limited animation uses fewer drawings per second, thereby limiting the fluidity of the animation.
4. **LIVE-ACTION/ANIMATION:** It is a technique combining hand-drawn characters into live action shots or live action actors into animated shots.
5. **STOP ANIMATION:** It is used to describe animation created by physically manipulating real-world objects and photographing them one frame of film at a time to create the illusion of movement. There are many different types of stop-motion animation, usually named after the medium used to create the animation. Computer software is widely available to create this type of animation; however, traditional stop motion animation is usually less expensive and time-consuming to produce than current computer animation.
6. **COMPUTER ANIMATION:** It encompasses a variety of techniques, the unifying factor being that the animation is created digitally on a computer. 2D animation techniques tend to focus on image manipulation while 3D techniques usually build virtual worlds in which characters and objects move and interact. 3D animation can create images that seem real to the viewer.

MULTIMEDIA & ANIMATIONS MAKE LEARNING FASTER: Well-designed animations may help students learn faster and easier. They are also excellent aid to teachers when it comes to explaining difficult subjects. The difficulty of subjects may arise due to the involvement of mathematics or imagination. For instance, the electric current is invisible. The operation of electric circuits is difficult for students to understand at the beginning. With the aid of computer animations, learning and teaching might become easier, faster and amusing.

TO CULTIVATE STUDENT'S INTEREST IN STUDY: Nowadays, the stereotyped traditional teaching methods and environment are unpopular while multimedia technology featuring audio, visual animation effects naturally and humanely makes us more access to information. Multimedia technology offers a sense of reality and functions very well, which greatly cultivates students' interest and motivation in study and their involvement in class activities.

TO PROMOTE STUDENTS COMMUNICATION CAPACITY: Traditional teaching has hampered students' capacity to comprehend certain language and also understanding to structure, meaning and function of the language, and makes the students passive recipients of knowledge, So it is hard to achieve the target of communication. With teachers' instructions leading students' thought patterns and motivating students' emotions, the multimedia technology seeks integration of teaching and learning and provides the students greater incentives, The PPT courseware activate students' thinking; the visual and vivid courseware rand help them to transforms English communication into capacity cultivation. And such in-class activities as group discussion, subject discussion, and debates can also offer more opportunities for communication among students and between teachers and students. So multimedia technology teaching has uniquely inspired students' positive thinking and communication skills in social practice.

TO IMPROVE THE TEACHING EFFECT: Multimedia teachings enrich teaching content and make the best of class time and break the "teacher centered" teaching pattern and fundamentally improve class efficiency. Due to large classes it is difficult for the students to have speaking communication. The utilization of multimedia sound lab materializes the individualized and co-operative teaching. The traditional teaching model mainly emphasized on teachers' instruction, and the information provided is limited due to traditional classes. On the contrary, multimedia technology goes beyond time and space, creates more vivid, visual, authentic environment for English learning, stimulates students' initiatives and economizes class time meanwhile increases class information.

TO IMPROVE INTERACTION BETWEEN TEACHER & STUDENT: Multimedia teaching stresses the role of students, and enhances the importance of "interaction" between teachers and students. Using multimedia in context creation creates a good platform for the exchange between teachers and students, while at the same time providing a language environment that improves on the traditional classroom teaching model. In this way, teachers in the classroom no longer blindly input information and force students to receive it in a passive way.

CONCLUSION:

It is true that one of the ultimate goals of animations and multimedia language teaching is to promote students' motivation and learning interest, which can be a practical way to get them involved in the language learning, Context creation of ELT should be based on the openness and Accessibility of the teaching materials and information. Concerning the development of technology, we believe that in future, the use of multimedia English teaching will be further developed. The process of English communication learning will be more student-centered but less time-consuming. Therefore, it promises that the teaching quality will be improved and students' applied English communication can be effectively cultivated, meaning that students' communicative competence will be further developed. In conclusion, we believe that this process can fully improve students' ideation and practical language skills, which is helpful and useful to ensure and fulfill an effective result of teaching and learning. Barring a few problem areas multimedia technology can be used effectively in classrooms of ELT with proper computer knowledge on the part of teachers, overcoming the finance problems in setting up the infrastructure and not allowing the teachers to become technophobes.

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Use of Multimedia And Animation In Teaching

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INTRODUCTION

In Teaching and learning communication skills, we have a lot to choose from the world of technology: TV, CD Rom, Computers, C.A.L.L., the Internet, Electronic Dictionary, Email, Blogs and Audio Cassettes, Power Point, Videos, DVD's or VCD's. The last two decades have witnessed a revolution due to onset of technology, and has changed the dynamics of educational institutes, and has also influenced the educational system and the way people interact and work in the society. This rapid rising and development of information technology has offered a better pattern to explore the new teaching model. Using multimedia to create a context to teach communication skill has its unique advantages. As a result technology plays a very important role in teaching communication skill.

This paper tries to analyze the necessity of multimedia technology to communication skill teaching and also educational animations are animations produced for the specific purpose of fostering learning. The popularity of using animations to help learners understand and remember information has greatly increased since the advent of powerful graphics-oriented computers. This technology allows animations to be produced much more easily and cheaply than in former years. Previously, traditional animation required specialised labour-intensive techniques that were both time-consuming and expensive. In contrast, software is now available that makes it possible for individual educators to author their own animations without the need for specialist expertise. Teachers are no longer limited to relying on static graphics but can readily convert them into educational animations

Application of Multimedia Technology Teaching:

To Cultivate Students' Interest in Study:

Nowadays, the stereotyped traditional teaching methods and environment are unpopular while multimedia technology featuring audio, visual animation effects naturally and humanely makes us more access to information besides, with such characteristics as abundant information and crossing time and space, multimedia technology offers a sense of reality and functions very well, which greatly cultivates students' interest and motivation in study and their involvement in class activities.

To Promote Students Communication Capacity:

Traditional teaching has hampered students' capacity to comprehend certain language and also understanding to structure, meaning and function of the language, and makes the students passive recipients of knowledge, So it is hard to achieve the target of communication. With teachers' instructions leading students' thought patterns and motivating students' emotions, the multimedia technology seeks integration of teaching and learning and provides the students greater incentives, The PPT courseware activate students' thinking; the visual and vivid courseware and help them to transforms English communication into capacity cultivation. And such in-class activities as group discussion, subject discussion, and debates can also offer more opportunities for communication among students and between teachers and students. So multimedia technology teaching has uniquely inspired students' positive thinking and communication skills in social practice.

To Widen Students' Knowledge to Gain an Insightful Understanding to Western Culture:

The multimedia courseware can offer the students abundant information; more plentiful than textbooks and help them to get of displays vivid cultural background, rich content and true-to-life language materials, which are much natural and closer to life. Not only could learners improve their listening ability, but also learn the western culture. Grasping information through various channels can equip; the students with knowledge and bring about information-sharing among students and make them actively participate in class discussion and communication.

To Improve Teaching Effect:

Multimedia teachings enrich teaching content and make the best of class time and break the "teacher centered" teaching pattern and fundamentally improve class efficiency. Due to large classes it is difficult for the students to have speaking communication. The utilization of multimedia sound lab

materializes the individualized and co-operative teaching. The traditional teaching model mainly emphasized on teachers' instruction, and the information provided is limited due to traditional classes. On the contrary, multimedia technology goes beyond time and space, creates more vivid, visual, authentic environment for English learning, stimulates students' initiatives and economizes class time meanwhile increases class information.

To Improve Interaction Between Teacher and Student:

Multimedia teaching stresses the role of students, and enhances the importance of "interaction" between teachers and students. A major feature of multimedia teaching is to train and improve students' ability to listen and speak, and to develop their communicative competence. During this process, the teacher's role as a facilitator is particularly prominent. Using multimedia in context creation creates a good platform for the exchange between teachers and students, while at the same time providing a language environment that improves on the traditional classroom teaching model. In this way, teachers in the classroom no longer blindly input information and force students to receive it in a passive way.

Creates a Context for Language teaching:

Multimedia teaching creates a context for language teaching. This method makes the class lively and interesting, as well as optimizing the organization of the class. Multimedia has its own features such as visibility and liveliness. During the process of multimedia English communication skill teaching, sounds and pictures can be set together, which enhances the initiative of both teachers and students. When using multimedia software teachers can use pictures and images to enrich the content of classes, and also imagine different contexts in the process of producing teaching courseware. Students in the class can use multimedia to understand the class in a clear way. Through the whole interactive process, it is apparent that using multimedia in ELT is effective in nurturing students' interest in learning English communication, as well as enhancing teachers' interest in English communication teaching. As Zhang (2006:11.1) points out through Multimedia and network technology we can offer students not only rich, sources of authentic learning materials, but also an attractive and a friendly interface vivid pictures and pleasant sounds, which to a large extent overcomes the lack of authentic language environment and arouses students' interest in learning English communication skill.

To Provide Flexibility to Course Content:

In addition, multimedia teaching is also flexible. It is obvious that the context can be created not only in the classroom, but also after class. Multimedia language teaching can also create a multimedia language environment for the purpose of conducting English communication teaching. Students are bound to have some problems in classroom teaching, which can be addressed under the guidance of teachers. In such circumstances, students can use the new technology to their advantage, such as manipulating the network to contact teachers, and receiving answers by emails

Animations for Education

Educators are enthusiastically taking up the opportunities that computer animation offers for depicting dynamic content. For example, PowerPoint now has an easy-to-use animation facility that, *in the right hands*, can produce very effective educational animations. Because animations can explicitly depict changes over time (temporal changes), they seem ideally suited to the teaching of processes and procedures.

In contrast with static pictures, animations can show temporal change *directly* (rather than having to indicate it indirectly using auxiliary markings such as arrows and motion lines). Using animations instead of static graphics removes the need for these added markings so that displays can be not only simpler and less cluttered, but also more vivid, engaging, and more intuitively comprehended. In addition, the learner does not have to interpret the auxiliary markings and try to infer the changes that they summarise. Such interpretation and inference may demand a level of graphicacy skills that the learner does not possess. With animated depictions, information about the changes involved is available to be read straight from the display without the learner needing to perform mental animation. It's a bit of an exaggeration, but it's more like being kissed instead of reading about a kiss.

Some animations challenge the learner's processing capacities

Research evidence about the educational effectiveness of animations is mixed. Various investigations have compared the educational effectiveness of static and animated displays across a number of content domains. While there have been some findings that show positive effects of animations on learning, other studies have found no effects or even negative effects. In general, it can be concluded

that animations are not *intrinsically* more effective than static graphics. Rather, the particular characteristics of individual animations and how they are used play a key role in the effects that they have on learning.

Do Animations Make Learning Faster

Well-designed animations may help students learn faster and easier. They are also excellent aid to teachers when it comes to explaining difficult subjects. The difficulty of subjects may arise due to the involvement of mathematics or imagination. For instance, the electric current is invisible. The operation of electric circuits is difficult for students to understand at the beginning. With the aid of computer animations, learning and teaching might become easier, faster and amusing.

Educational effectiveness

Animations may lack educational effectiveness if target learners can't process the presented information adequately. For example, it seems that when the subject matter is complex, learners may be overwhelmed by animated presentations. This is related to the role of visual perception and cognition in human information processing. Our human perceptual and cognitive systems have limited capacities for processing information. If these limits are exceeded, learning may be compromised. For example, the pace at which the animation presents its information may exceed the speed at which the learner can process it effectively. The accompanying animation (part of a pumping system) is problematic for this reason. But the solution is obvious: slow the animation down and accompany it with a written explanation. It is unlikely that superior learning is achieved by thoughtlessly substituting animation for a static graphic but by having it accompany textual explication. Another suggestion for addressing such problems is to provide user control for the learner over how the animation plays. User controllable animations allow learners to vary aspects such as the playing speed and direction, labels and audio commentary to suit themselves.

7. Conclusion:

It is true that one of the ultimate goals of multimedia language teaching is to promote students' motivation and learning interest, which can be a practical way to get them involved in the language learning. Context creation of ELT should be based on the openness and Accessibility of the teaching materials and information. Concerning the development of technology, we believe that in future, the use of multimedia English teaching will be further developed. The process of English communication learning will be more student-centered but less time-consuming. In conclusion, we believe that this process can fully improve students' ideation and practical language skills, which is helpful and useful to ensure and fulfill an effective result of teaching and learning. .

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E-Learning

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Elearning is learning utilising electronic technologies to access educational curriculum outside of class room. In most cases it refers to a course or program delivered completely online. There are many forms used to describe learning that is delivered online via the internet, ranging from distance education computerize electronic learning, online learning, internet learning and many others. we define elearning as a course that specifically delivered via the internet to somewhere other than the class room. The flexible nature of elearning means that we are likely to encounter it in every day life. Some people seek it out in for additional learning opportunities and for career advancement.

Simply put elearning is everywhere and it certainly comes with some pretty awesome advantages such as Scalable, Capacity and consistency, High learning retention, Time and money saving, Activity and ROI measurement, Reduction of the carbon footprint and Flexible.

Potential drawbacks are that elearning can be Technology dependent, Material incompatibility, Unsuitable for certain types of training, Unsuitable for certain types of learners, Reliant of the quality of the content, No match for face to face teaching, Inflexible and Economic & social disadvantages.

கற்றல் கற்பித்தல் செயல்பாடுகள் சரியான திசையில் செல்வதை
உறுதி செய்தல்

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முன்னுரை

கல்வி என்பதற்கு பொதுவாக கற்றல் என்பதுடன் இணைத்து பொருள் கூறப்படுகிறது. பிறப்பு முதல் மனிதனிடம் இயற்கையாக அமைந்து காணப்படாமல் பின்னர் பெறும் அனுபவங்களும் அவற்றின் விளைவுகளும் ‘கற்றல்’ என்பதனுடன் அடங்கும்.

அறிவுடையார் எல்லாம் உடையவர். அறிவின் அடிப்படை கல்வியாகும். ஒருவருக்குக் கல்வியே கேடற்ற செல்வமாகும். ஆண், பெண் ஆகிய அனைவருக்கும் வேறுபாடு இன்றியமையாத ஒன்றாக திகழ்வது யாதெனின் கல்வியே ஆகும். எந்தவொரு சமூகத்தினரும் இக்கல்வியை கற்பதிலிருந்து விலகிச்செல்வது இன்றைய உலகில் மிகவும் அரிதாகக் காணப்படுகிறது. ஏனெனில் கல்வியின் சிறப்பை அனைத்து சமூகங்களும் புரிந்துள்ளன. இதனால் தான் இன்று கல்வியானது மனிதனின் அத்தியாவசிய தேவையாக இருக்கிறது.

‘கேடில் விழுச்செல்வம் கல்வி ஒருவற்கு

மடல் மறையவை’

என்ற வள்ளுவரின் திருக்குறளுக்குேற்ப எல்லா, செல்வங்களைக் காட்டிலும் ஒன்று உலகில் உண்டென்றால் அது கல்விச் செல்வமேயாகும்.

அக்கல்விச் செல்வத்தை ஆசிரியர் சமுதாயம் மாணவச் செல்வங்களுக்கு கற்பித்தல் செயல்பாடுகள் மூலமாக வற்றாத நீருற்றாய் நாளும் வழங்கி வருகிறது.

‘எண்ணும் எழுத்தும்’ கண் எதை தகும்

என்றார் ஒளவையார்.

‘கண்ணுடையார் என்பவர் கற்றோர்’

என்றார் வான்புகழ் வள்ளுவர்

கல்வியறிவு படைத்த ஒருவனை வேந்தனும் விரும்புவான் என்கிறது வெற்றி வேற்கை.

கல்வி விளக்கம் :

‘கல்வி’ என்பதன் வேர்ச்சொல் ‘கல்’ என்பதாகும். ‘கல்’ என்பதற்கு கல்லுதல், தோண்டுதல் துருவுதல் என்று பொருள்படும்.

கல்வி – கற்பித்தல் - கற்றல்

கல்வி – எடுத்தல் - வளர்த்தல்

‘நுனரஉயவழை’ என்ற சொல் ‘நுனரஉயவந்’ என்ற இலத்தின் மொழிச்சொல்லிலிருந்து பெறப்பட்டது. குநனரஉயசந என்பதன் பொருள் வெளிக்கொணர்தல் என்பதாகும். ‘நுனரஉயவழை’ என்ற சொல் பயிற்றுவித்தல், பயிற்சியளித்தல் ஆகிய பொருள்களைத் தருகிறது.

கல்வியில் கற்பித்தல் என்பது ஆசிரியர் தன் உன் ஒளியை, தான் கற்பிக்கும் மாணவனின் உள்ளுலியாக மாற்றுவதாகும்’ என்கிறார் கவிஞர்.

இந்திய அறிஞர்களின் கல்வி பற்றிய கருத்துக்கள்

அ) இரவீந்திரநாத் தாகூர்

1) உறவுகளை வளர்க்கவும், இயற்கையுடனும், சூழ்நிலைகளுடனும் இணைந்து செல்வதற்கு செய்வது தான் கல்வியின் பணி' என்றும்,

ஆ) சுவாமி விவேகானந்தர்

1) இயற்கையாகவே மனிதன் தனக்குள்ளே புதைந்துள்ள தெய்வீகமாக பூரணத் தத்துவத்தை வெளிக்கொணர்வதே கல்வி' என்றும்,

இ) காந்தியடிகள்

கல்வி என்பது குழந்தையின் உடல், உள்ளம், ஆன்மா ஆகிய அதன் ஆளுமைக்கூறுகளின் சிறந்த பண்புகளை வெளிக்கொணர்தல் (அன்பு, அறிவு, உழைப்பு, ஆற்றல் போன்றவற்றை அளிப்பதாக கல்வி அமைதல் வேண்டும் என்கிறார்.

ஈ) அரவிந்தர்

வளரும் ஆன்மாவிற்கு தன்னுள் உள்ளவற்றை வெளிக்கொணர உதவுவதே கல்வி எனக் கல்விக்கு புதிய வரையறை நல்குகிறார்.

மேற்கத்திய கல்வியாளர்கள்

ஒருவனை முழுமையான மனிதராக மாற்றுவது கல்வி என்றும்,

3. கல்வி என்பது இயல்பிலேயே மனிதனிடம் பொதிந்து கிடக்கிற நற்பண்புகளை வெளிக்கொணர்தல் என்று கூறுகிறார்.

அ) பிளாட்டோ

கல்வி என்பது மனிதனின் உடல், உயிர், அறிவு இவற்றை மேம்படச் செய்கிறது.

ஆ) அரிஸ்டாட்டில்

கல்வி மனிதனுடைய உள்ளுணர்ச்சியையும், அறிவுக்கர்மையையும் விளக்கமுறச் செய்து தன் அழகு, நலம் நன்மை வாய்மை முதலியவற்றைச் சிந்திக்கத் தூண்டுகிறது. (கல்வி உறுதியான உடலிலே உறுதியான உள்ளத்தை உருவாக்குவது) என்று அரிஸ்டாட்டில் கூறியுள்ளார்.

இ) நன்

முழு மனிதனை உருவாக்குவது என்று கோமினியசும், பண்புகளை உருவாக்குவது என்று டே ஆனந்தும், உண்மையான அறிவை வளர்ப்பது என்று ஏமராசும்

இ) மனிதனின் தனித்தன்மைகளை முழுமையாக வளர்ப்பது என்றும் நன் என்பாரும் கூறியுள்ளார்.

ஈ) பிரோபெல்

கல்வி என்பது மூடப்பட்டிருந்த முத்துக்களைத் திறப்பது போன்றதாகும். மனித வளர்ச்சி மேம்பாட்டிற்கு கல்வி வளர்ச்சியே முதல் காரணி 'கல்வி வளர்ச்சி அறிவு வளர்ச்சி' என்கிறார்.

உ) மாண்டிசேரி

கல்வி என்பது குழந்தையின் வளர்ச்சியை அடிப்படையாக கொண்ட ஒரு சுதந்திரமான செயல்முறையாகும். இவரது கல்வி முறை புலன் அனுபவக்கல்வி என்று அழைக்கப்படுகிறது.

தேசியக் கல்விக் கொள்கை

சுயவேலை வாய்ப்பு அறிவியல் தொழில்நுட்ப வளர்ச்சி ஆளுமைத்திறன் ஆகியவற்றை இன்றைய இளைஞர்கள் பெற்றிட கல்வி உதவ வேண்டும் என்று வலியுறுத்துகிறது.

கல்வியின் நான்கு தூண்கள்

1. அறிவைப் பெறுவதற்காக கற்றல்
2. செயல்புரியக் கற்றல்
3. கூட்டாக வாழ்வதற்குக் கற்றல்
4. சுயம் இழக்காமல் இருப்பதற்குக் கற்றல்

வருங்காலக் கல்வியின் அடிப்படையாகவும் இதனைக் கருதலாம்.

கல்வியினைக் கற்றுக் கொடுப்பதனால் 7சு மாணவர்களிடம் ஏற்படுத்த முடியும்.

1. படித்தல் சுநயனபை
2. எழுதுதல் ருசவைபை
3. கணக்குப்போடல் யுசவாஅநவபை
4. உரிமைகள் சுபாவள
5. கடமைகள் சுநளிழளெழைடைவைநள
6. உறவு சுநடயவழைளொனி
7. புதியன படைத்தல் சுநஉசநயவழை

பழமையான நோக்கத்தையும் புதிய நோக்கத்தையும் சேர்த்து ஏழு என்று கூறுவார்கள்.

கல்வியின் சிறப்புத் தேவைகள்

தெளிவாக நூல்களை கற்றல்

‘கற்க கசடற கற்பவை கற்றபின்

நிற்க அதற்குத்தக என்று குறளாசிரியர் கூறுவர்.

‘எழுதரிது முன்னம் எழுதிய பின்னர்

பழுதறவா சிப்பரிது பண்பாய் - முழுது மதைக்

கற்பரிது நற்பனைக் காண்பரிது கண்டக்கால்

நிற்பரிது தானந் நிலை’

ஒரு நூலினை ஏட்டிலே பெயர்த்து எழுதுதல் அரிதான செயலாகும். அந்த அரிய செயலை செய்தாலும், அப்படி எழுதியுள்ளதனைக் குற்றமின்றிப் படிப்பதற்கு கல்வி தேவை. பிறவியின் தன்மையினை உள்ளபடியே உணர்ந்து வாழ்வதற்கான நற்பயனைக் கண்டுணர்வதற்கு கல்வி அவசியம் ‘அங்ஙனம் கற்றதன் பயனை நற்பயனைக் காணுகின்ற தெளிவினைப் பெற்றவர்கள் மிகவும் சிறந்தவர்கள். அவர்களின் நிலையில் தனத நிலைபெறும் உறுதித்தன்மையினையும் பெறுதல் வேண்டும். இங்ஙனம் நிலையின்றி பிறழாது அவர் உறுதியாக நிற்பாரானால், அதுவே கல்வியினை அடைந்ததாகும்.

வளர்ச்சி – உடல் (ஆள்) வளர்ச்சி + அறிவு (உள்ள) வளர்ச்சி

ஆளுமை = உடல்வளர்ச்சி + மன வளர்ச்சி

தனிமனித நோக்கம்

1. உடல் வளர்ச்சி
2. அறிவு வளர்ச்சி
3. மொழி வளர்ச்சி
4. அறமொழி வளர்ச்சி
5. சமூக இயல்பு வளர்ச்சி
6. ஆன்மீக வளர்ச்சி
7. மனஎழுச்சி வளர்ச்சி
8. பண்பாட்டு வளர்ச்சி

மாணாக்கர்

குழந்தைகளிடம் உள்ளமைந்து கிடக்கும் பல்வேறு ஆற்றல்களையும் திறன்களையும் வெளிக்கொணர கல்வித்தேவை. கற்றல் செயல்பாடுகள்

மாணாக்கர்களது நிலையை உயர்த்த உதவுகிறது. மாணாக்கர்களது வளர்ச்சியின் தன்மையையும் அவ்வளர்ச்சியின் விளைவாக அவர்கள் பெறும் பயன்களும் கல்வியின்றி எவ்வாறு இயற்கையாக காணப்படுமோ அந்நிலையினின்றும் கல்வி பெறுவதன் விளைவாக மாற்றம் பெற்றும், உயர்நிலைப்படும் காணப்பட உதவுகிறது. குழந்தையின் ஆளுமை வளர்ச்சியே கற்றலின் நிலையாய் நோக்கம் படைக்கும் திறனையும், சிந்தனைத் திறனையும் வளர்த்து எதிர்காலத்தோடு ஈடுகொடுக்கும் எதிர்காலச் சமுதாயத்தை உருவாக்க கல்வி உதவுகிறது. ஆழந்த அறிவுக்கு வழிவகுக்கிறது. சமூகத்தின் சிறப்பான உறுப்பினர் செயல்பட நலமான வாழ்க்கைக்குத் தேவையான பொதுத்திறன்களைப் பெற்றிட கல்வி உதவுகிறது. மாணவர்கள் தக்க சூழ்நிலையில் நல்லமுறையில் உடல், உரமும் மன வளமும் பெற்று சிறந்த குடிமக்களாகத் திகழ கல்வித்தேவை. சமூகத்தின் நற்குடிமக்களாகப் பயிற்றுவித்தல் கல்வியின் பணியாகும். இச்செயல்பாடுகள் முழுமை பெறுகின்ற போது தான் கற்றல் கற்பித்தல் செயல்பாடுகள் சரியான திசையில் செல்வதை உறுதி செய்யமுடியும்.

தனிமனிதன் வாழ்விற்கு உதவுதல்

கல்வி தனிமனிதனை நல்ல குடிமகனாக மாற்ற உதவுகிறது. கல்வி ஒரு மனிதனை சமுதாயத்திற்குப் பயனள்ள வகையிலும், தனது சமுதாயக் கடமைகளை ஆர்வமுடன் நிறைவேற்றக்கூடியவனாகவும் உருவாக்க உதவுகிறது. தனிமனிதனுக்கு உறுதியான ஆரோக்கியமான உடலையும் அவனுடைய மனித பண்பினை வளர்ப்பதற்கு உதவும் வகையில் கல்வி அமைதல் அவசியம். ஒரு தனிமனிதனுடைய உடல், அறிவு, மொழி, அறநெறி, சமூக இயல்பு, ஆன்மீகம், மனஎழுச்சி, பண்பாட்டு முதலியவை வளர்ச்சி பெறுவதற்கு கல்வித்தேவை. வருவாய் உள்ள தொழிலை நடத்தவும் ஓய்வு நேரத்தை பயனள்ள வகையில் கழிக்கவும் கல்வி உதவுகின்றது. ஒவ்வொரு தனிமனிதனும் பொருளாதார நிலையில் மற்றவர்களுக்குச் சுமையாய் இராமல் தன்னைத்தானே காப்பாற்றிக்கொள்ளும் திறன் பெற உதவுகிறது.

சமூக நோக்கம்

சமுதாய நலன் சமுதாயத்திற்கு குடியுரிமைத்தன்மை, ஆகியவை மனிதன் சமூக பண்புகளோடு இணைந்து வாழ உதவுதல் வேண்டும்.

தன்னைச்சுற்றியுள்ள சமூகத்தை புரிந்து கொள்ளும் அளவிற்கு அறிவும் திறனும் பெற்றிருக்க கல்வி தேவையாகிறது. சமூகத்திலுள்ள சகக் குடிமக்களோடு வழங்குவதில் நீதி முறைகளை கடைபிடிக்க கல்வி ஒரு தனிமனிதனுக்கு தேவை.

அந்தக் காலத்தில் இருந்த கல்வித்திட்டம் நாட்டின் தேவைகளை நிறைவேற்றுவதாக இல்லை. எனவே தொடக்கக்கல்வி குறைந்தபட்சம் ஏழு வயது வரை விரிவுபடுத்தப்பட்டது. அதில் பொது அறிவு, தாய்மொழிக்கல்வி, கைத்தொழில் ஆகியவற்றைக் கற்பித்தல் வேண்டும். ஏட்டுப்படிப்போடு உடலுழைப்பும் தேவை என்றும் இந்திய மாணவர்களை சிறந்த குடிமக்களாக உருவாக்குவதற்கும் இந்திய பண்பாட்டை அவர்களிடம் ஊட்டுவதற்கும் கல்வித்தேவை.

சமுதாயப் மதிப்பு பெறுதல்

‘கண்ணுடையர் என்பவர் கற்றோர்’

கற்றோர்க்குச் சென்ற இடமெல்லாம் சிறப்பு.

கற்றவர் எங்குச் சென்றாலும் மதிக்கப்படுவர், சமுதாய மதிப்பு கல்வியில் மட்டுமே உலகெங்கும் இருந்து வருகிறது. ஒரு நாடு மட்டுமல்லாமல் எந்த நாட்டிற்கு சென்றாலும் கற்றவர்க்கு மதிப்பு உண்டு. கல்வி கற்றவன் எந்த இடத்திற்கு சென்றாலும் அவன் பிற சமூகத்தால் மதிக்கப்படுவதற்கு காரணம்

அவன் கற்ற கல்வியே கற்றவனுக்கு நன்றாகும் ஊருமேயல்லாமல் எந்த நாடும், ஊரும் தன்னுடைய ஊராகும். ஒருவன் தான் மரணிக்கும் நாள் வரை கல்வி கற்க வேண்டும் கற்காமல் இருந்தால் சிரமமானதாகிவிடும். இதனையே திருவள்ளுவர் மிகவும் அழகாக வருணித்துள்ளார்.

‘யாதானும் நாடாமல் ஊராமல் என்னொருவன்

சாத்துனையும் கல்லாதவவாறு’ என்ற குறளின் மூலம் தெளிவாக அறியலாம் கல்வி கற்ற அறிவுடையவர்கள் தேவர்க்குச் சமமாக மதிக்கப்படுகின்றார்கள். படித்தவர் பிறருக்குத் தாம் படித்ததை எடுத்துக் கூறுவதே அறம் ஆகும்.

செல்வம் பெறுதல்

கல்வியைப் போன்ற செல்வம் எதுவுமில்லை என்பதை

‘கேடில் விழுச்செல்வம் கல்வி ஒருவற்கு

மாடல்ல மற்றை யாயவை’

என்கிறார் வள்ளுவர். நாடு விட்டு நாடு சென்று கற்கப்போகிறார்கள். செல்வம் ஈட்டிச் செல்கின்றனர். மேலை நாடுகளுக்கு இன்றைய இளைஞர்கள் சென்று வருவதற்கு இங்கு கற்கும் கல்வி உறுதுணையாக இருக்கின்றது.

‘ஒருமைக்கண் தான் கற்ற கல்வி ஒருவற்கு

எழுமையும் ஏமாபுடைத்து

என்றும் திருக்குறளில் வள்ளுவர் அழகாகக் கூறியுள்ளார். கல்வி தொழிலுக்கு வழிகாட்டுகிறது. ஒருவனுக்கு பெருமையும், புகழையும் தேடித்தரும் செல்வம் கல்விச் செல்வமேயன்றி வேறு இல்லை.

அறியாமை அகற்றுதல்

‘இம்மை பயக்குமால் ஈயக் குறைவின்றால்

தம்மை விளக்குமால் தாமுளராக் கேடின்றால்

எம்மை உலகத்தும் யாம்கானோம் கல்வி போல்

மம்மர் அறுக்கும் மருந்து’

கல்வி இப்பிறவியின் பயனை அளிக்கும். மற்றவர்களுக்கு அதனை வழங்குவதால் அது குறைவதில்லை. கற்றவர்களை அறிவால் விளங்கச் செய்யும். தாம் இருக்கும் வரை அதுவும் அழியாமல் இருக்கிறது. எந்த உலகத்திலும் கல்வியைப் போல அறியாமையை நீங்கும் மருந்தை நாம் கண்டதில்லை. கல்விதான் வாழ்க்கையில் ஏற்படும் எல்லாத் துன்பங்களுக்கும் காரணமான அறியாமை நோயை அழிக்கிற மாமருந்தாக இருக்கிறது என்றால் மிகையாகாது.

ஒழுக்கத்தை வளர்த்தல்

‘ஒழுக்கம் விழுப்பம் தரலான் ஒழுக்கம்

உயிரினும் ஓம்பப்படும்’ என்ற குறையில் ஒழுக்கம் எவ்வளவு உயர்ந்தது என்பதை அழகாக வள்ளுவர் எடுத்துரைக்கிறார். இத்தகைய உயர்ந்த ஒழுக்கத்தை ஒருவன் பெற்றிட கல்வி அவனுக்கு உதவி செய்கிறது. நாம் நல்லவராக இருக்கிறோம் என உள்ளம் அறிய உண்மையாய் உணரும் ஒழுக்கத்தை அளிப்பதால் மக்களுக்கு கல்வியின் அழகே சிறந்த அழகாகும். நல்ல ஒழுக்கத்தைத்தரும் கல்வியே மக்களுக்கு சிறந்த அழகாகும்.

வாழ்க்கைப் பயணத்திற்கு உதவுதல்

‘சாரம் போக்கி உலகு கொண்டார் இல்லையே இல்லை

மரம் போக்கிக் கூலி கொண்டார்’

என்ற பழமொழி பயணம் செய்வதற்குப் படகின் கூலியை முன்னதாகக் கொடுத்து ஆற்றைக் கடப்பதற்கு வழிவகை செய்து கொண்டதற்கொப்ப தன் எதிர்காலத்தைச் செம்மையாகக் கடப்பதற்கு இளவயதில்,

‘கற்கை நன்றே கற்கை நன்றே
பிச்சை புகினும் கற்கை நன்றே’

என்ற முதுமொழிக்கேற்ப பிறரிடம் உதவி பெற்று கற்பது சிறந்தது. இளவயதில் கல்வியைக் கற்றுத்தேர்வது, என்றும் வாழ்க்கை பயணத்தைக் கடக்க நலம் பயக்கும் என்பதில் ஐயமில்லை. பிறர் கைகளை எதிர்பார்த்து வாழாமல் தன்சொந்த கைகளை நம்பி வாழ்வதற்கு வாழ்க்கையில் கல்வி அவசியம் தேவை. ஒரு பெண் கல்வி கற்றால் அவள் குடும்பமே கல்வி கற்பதற்கு உதவுகிறாள். குடும்பத்தை வறுமையிலிருந்து செல்வ செழிப்பிற்கு கொண்டு வருவதற்கு கல்வி உதவுகிறது. தான் மட்டும் வாழாமல் பிறரையும் வாழ வைப்பதற்கு உதவுவது கல்வி.

வாழ்க்கைத் திறன்கள்

ஒருவரின் உடல், உள்ளம், உணர்வு ஆகியவற்றை நலமாக வைத்துக் கொள்ள உதவும் திறன்களே வாழ்க்கைத் திறன்கள் ஆகும். உலக நலநிறுவனம் வாழ்க்கைத் திறன்கள் பற்றிப் பின்வருமாறு விளக்குகிறது. ‘அன்றாட வாழ்க்கை நிகழ்வுகளையும், தேவைகளையும் ஒவ்வொருவரும் திறமையாக எதிர்கொள்வதற்கு நேர்மையான சிந்தனைகளையும், நடத்தைகளையும் பெற்றிருத்தல் இன்றியமையாதது. அதன் பொருளாவது குழந்தைகள் சமுதாய உளவியல் திறன்களையும் உள்ளார்ந்த திறன்களையும் வளர்த்துக் கொள்ளுதல் ஆகும்.

வாழ்க்கைத் திறன்களை வளர்த்தல்

அ) தன்னை அறிதல்

தன்னம்பிக்கை வளர்த்தல், மரியாதை தருதல், பிறரை மதித்தல், தன் திறமை, குறைகளை அறிந்திருத்தல், சூழலுக்கேற்பவும் நேர்மையாகவும் முடிவெடுத்தல், சுய முடிவு எடுத்தல் மற்றும் தெரிவித்தல் போன்ற பண்பு நலன்களை வெளிப்படுத்தவும், அறிந்து கொள்ளவும் கல்வி தேவைப்படுகிறது.

ஆ) துணிந்துரைத்தல் / மறுத்தல் திறன்

தேவையற்ற செயல்களில் தன்னைக் கட்டுப்படுத்தும் ஆற்றல், பிறரிடத்தில் தன்னை நிலைநாட்டலி, தீச்செயல் தீயநோக்குடன் தொடுதலை எதிர்த்தல், ஒத்தவயதுடையவர்களுடன் உறுதியாகவும், இணக்கத்துடனும் இருத்தல், புதியவர்களுடன் எச்சரிக்கையுடன் இருத்தல் காமறிந்த தேவைக்கு மட்டும் உதவி பெறுவதற்கும் கல்வி மிகவும் உறுதுணையாக அமைகிறது.

இ) பகுத்தறியும் திறன்

குறிக்கோளும், திறமையும் வெளிப்படும் காரணகாரிய தொடர்புடைய சிந்தனை. இடல்பாடான சூழலிலும் வளமார்ந்த சிந்தனை கட்டுப்பாட்டின் கூடிய செயல்பாடு, தோல்வியை வெற்றிப்படியாக மாற்றும் சிந்தனைத்திறன்களை ஒரு மனிதன் பெற்றுக் கொள்வதற்கும் அவதூறு சிந்தனைத்திறன் வளர்ச்சி அடையவும் கல்வி பயன்படுகிறது.

ஈ) செய்தி வெளிப்பாட்டுத்திறன்

குறிக்கோளை நோக்கிய தெளிவு பெறுவதற்கும், உற்று நோக்குவதற்கும் குற்றம் பாராது கருத்துக்களைப் பாராது கருத்துக்களைப் பகிர்ந்து கொள்ளுதல், மீள் கருத்துக்களை ஏற்றல், வற்புறுத்தாத மனஉறுதி, தேவையான உரிய உடலசைவுகளை பயன்படுத்துவதற்கு கல்வி கற்ற ஒருவரால் தான் புரிந்துகொள்ள முடியும்.

உ) குழுப்பணி

குழுவில் முன்னின்று பணியாற்றும் தன்மை, பிறர் கருத்துக்கு மதிப்பளித்தல், பொறுப்புடன் செயல்படும் தன்மை, குழுவினர் கூறும் மீள் கருத்துக்களையும், திறனாய்வுக் கருத்துக்களையும் நேர்மறையாக எடுத்துக்

கொள்ளுதல் போன்ற நற்பண்புகளை பெற்றுக் கொள்வதற்கு கல்வி அவசியமாகிறது.

மனப்பான்மைகளும் மதிப்புகளும்

தேசிய மற்றும் மாநில அரசு சார்பான சின்னங்களுக்கு மரியாதை செலுத்துதல்

தேசிய மற்றும் மாநில அரசு சார்பான சின்னங்களை அறிதல், அதன் பொருளையும், தனிச்சிறப்பையும் புரிந்து கொள்ளுதல், விடுதலை திருநாள், குடியரசு திருநாள், கொடியேற்றங்களில் கலந்து கொள்ளுதல், ஒழுங்குடனும், மகிழ்ச்சியுடனும் தமிழ்த்தாய் வாழ்த்தையும், நாட்டுப்பண்பையும் பாடுதல், இந்தியன் என்னும் உணர்வு வெளிப்படுமாறு நடந்து கொள்ளுதல் இவற்றை அறிந்து கொள்ளவும், அதன்படி நடக்க கல்வி அவசியம் என்றால் மிகையாகாது.

பாராட்டுத்தக்க பண்புடைமை

எப்பொழுதும் பொருத்தமான பண்புகளையே வெளிப்படுத்துதல், சொல்லிலும், செயலிலும் அனைவருக்கும் மதிப்பளித்தல், நண்பர்களுக்கு உதவுபவராகவும் அவர்களின் மனத்திற்கினியவராகவும் இருத்தல், சமூக நன்னடத்தையினை வகுப்பிலும், வெளியிடங்களிலும் வெளிப்படுத்துதல், சினங்கொள்ளும் நிலையிலும் பண்பு நிலையிலிருந்து தவறாமல் இருத்தல் போன்ற பண்புகளை வளர்க்க கல்வி தேவையாகிறது.

பள்ளி மற்றும் சமூகத்தில் உள்ள பொதுச் சொத்தக்களைப் பாதுகாத்தல்

பள்ளியின் தளவாடல் பொருட்களையும் அவர்களையும் சேதப்படுத்தாமல் இருத்தல், மனம்போன போக்கில் வன்முறையில் ஈடுபடுவதும் அதனால் பள்ளியின் சொத்துக்களைப் பாழ்படுத்தாமல் இருத்தல், மின்சாரச் சாதனங்களைத் தேவைப்படும் பொழுது மட்டும் பயன்படுத்துதல், பிறரால் ஏற்படும் கலைப்பண்பாட்டுச் சீரழிவுகளைத் தடுத்தல், பொதுச் சொத்துக்களைப் பாதுகாப்பதில் பங்கேற்றல் இச்செயல்களை கல்வி கற்ற ஒருவரால் சிறப்பாக கைக்கொள்ள முடியும்.

பிற உயிர்களிடத்தில் அன்பு காட்டுதல்

மகிழ்ச்சியுடனும், நேர்மறைச்சிந்தனையுடனும் இருத்தல், அடுத்தவருக்கு முன்வந்து தாமாக விட்டுக்கொடுத்து உதவுதல், தாவரங்களையும், மரங்களையும் பாதுகாத்து வளர்க்க முன்வருதல், எம்முறையில் விலங்குகளை உயிர்களைத் துன்புறுத்தாத பண்புடன் இருத்தல், துன்புறுத்தும் முன் மற்ற உயிர்களின் நிலையில் இருந்து பார்த்தல் என்ற பண்புகளை பெற கல்வி உதவுகிறது எனலாம்.

சாலை விதிகள் மற்றும் பாதுகாப்பைக் கடைபிடித்தல்

சாலை விதிகளை விழிப்புடன் பின்பற்றுதல், விளையாட்டுத் திடலில் பாதுகாப்பு விதிகளைக் கடைபிடித்தல், மின் பொருள்கள் மின்மாற்றிகளில் கை வைக்காதிருத்தல், சமயலறைச் சாதனங்களைப் பாதுகாப்புடன் கையாளுதல், நீர்நிலைகளில் போதிய எச்சரிக்கையுடன் இருத்தல் போன்ற செயல்பாடுகளில் கவனமுடன் இருப்பதற்கு கல்வி உதவி செய்கிறது.

சுற்றுச்சூழல் மதிப்பு

பயன்பாட்டைக் குறைத்தல், மறுபயன்பாடு மற்றும் மறுசுழற்சி பற்றி அறிந்திருத்தல், உயிர்களின் பலதரப்பட்ட வகைகளையும், அவற்றைப் புவியில் பாதுகாக்க வேண்டிய அவசியத்தையும் புரிந்து நடந்து கொள்ளுதல், சுற்றுப்புற மாசினால் விளையும் தீமைகளை அறிந்திருத்தல், சுற்றுப்புறத்தைப் பாதுகாக்க பள்ளி மேற்கொள்ளும் நடவடிக்கைகளில் முழுமையாகப் பங்கேற்றல், சுற்றுப்புறச் சூழல் சார் செய்திகளால் பரப்பத் தேவையான நடவடிக்கைகளை மேற்கொள்வதற்கும் கல்வி மிகவும் இன்றியமையாததாகிறது.

மனப்பான்மைகளும், மதிப்புகளும்

மனப்பான்மைகளும், மதிப்புகளும் ஒரு குழந்தை தான் விரும்பும் வாழ்க்கையின் தரத்தை நிருணயம் செய்யும் அளவீடுகளாகும். சில மதிப்புகள் உள்ளார்ந்தவை. அவை ஓர் ஆசிரியரால் தூண்டிவிடப்படலாம். பிற மதிப்புகள் மூன்றுதாரணங்களைக் காட்டியே வளர்க்கப்படுகின்றன. முழுமையான கல்வி சமூகக் கொள்கைகளான இணக்கமான ஒப்புரவு, சமுதாயநிலை, மரியாதை மற்றும் சகிப்புத்தன்மை போன்ற பண்புகள் வளர சாத்தியமாகிறது. நேர்மையாக நடந்து கொள்ளுதல், ஒழுக்கமாக இருத்தல் மற்றும் சமூகக்கேடுகளை எதிர்க்கும் பண்புகள் போன்றவை உள்ளார்ந்தவை ஆகும்.

‘கள்வனால் கவர முடியாத
இளமையில் கற்ற கல்வி
எழுமையும் பெருமை தருமே
முழுமையும் பெறுவீர் அதனை!

வெள்ளத்தால் அடித்துச் செல்லாத
விழுமிய செல்வம் கல்வி
வேண்டிய பொருளை ஈந்தும்
வேண்டுவீர் அதனை இன்றே!

மலையென் பெற்ற செல்வம்
அலையென கரைந்த போதும்
நல்வழி காட்டும் கல்வி
நன்மை என்றும் தருமே!

கொடையெனும் உயர்ந்த பண்பால்
கொடுத்திடும் கல்வி மட்டுமே
பெறுபவர் அன்றி கொடுப்பார்
இருவர்க்கும் இன்பம் பயக்கும்!

எண்ணுடன் எழுத்தும் வாழ்வின்
கண்களாய் வண்ணம் கூட்டும்
துன்பத்தைத் தீர்க்கும் செல்வம்
இன்பமாம் கல்வி கற்பீர்..!

முடிவுரை

மாவீரன் உலகத்தைத் தம் கல்விக்குரிய பள்ளியாகக் கருதி உலா வந்ததாகக் கவிஞர் டென்னிசன் பாடுகின்றார். ‘கல்வி கரையில் கற்பவர் நாள் சில’ என நாலடியார் கூறுகிறது. கற்கத் தகும்கல்வி ஏராளம், மனிதனுக்கு வரையறுக்கப்பட்ட நாளோ சில, கல்வி கற்றவரிடம் ஒழுக்கம், பண்பு, நேர்மை, நீதி இவைகள் அனைத்தும் ஒருங்கே அமைந்து காணப்படும். எனவே, கல்வியானது ஒரு மனிதனின் முக்கிய தேவையாக இருக்கிறது. எந்தவொரு சமூகம் கல்வி இல்லாமல் இருக்கிறதோ, இக்காலத்தைப் பொறுத்தவரை மிகவும் தாழ்வாகவும், இழிவாகவும் கருதப்படும். ஒருவன் தான் எவ்வளவு கல்வி கற்றாலும் அதனை செயல் வடிவில் தக்க வைக்க வேண்டும். எல்லா மக்களிடமும் நன்றாக பழகிக் கொள்வதோடு மட்டுமில்லாமல் அவர்களுடன் மகிழ்ச்சியாக சேர்ந்து வாழ்வதற்கும் கல்வி கற்றவர்களால் தான் முடியும். இதனை அடிப்படையாகக் கொண்டு தான் கற்றல் கற்பித்தல் செயல்பாடுகள் இன்று சரியான திசையில் செல்வதை நாம் உறுதி செய்த முடிகின்றது.

Animation in Educational Instruction

S.Anton Methodius Amaladas

Bank Official, Canara Bank, Namakkal

This paper aims at explaining the animation in the field of teaching as a medium of instruction. Animation in computer-based instruction holds powerful instructional potential. Instructional animation is used in computer-based instruction to accomplish one of three functions: attention-gaining, presentation and practice animation in visual display fulfils five instructional roles: as an attention guide; as an aid for illustrating functional or procedural behaviour; as a representation of domain knowledge entailing movement; as a device model for forming a mental image of system functions which are not directly observable; and as a visual analogy or reasoning anchor for understanding abstract concepts. Computer graphic technology including innovative capabilities previously unavailable through printed text or still pictures is strategically applied in instruction with rationales. It is presenting new challenges to traditional educational practice. Three major rationales to employ animation in computer-based instruction are as discussed below:

Animation, like other instructional visuals, should facilitate recall and retention when it illustrates visually-based or spatially-based facts or concepts which are related with movements. Animated graphics are probably much better than static graphics at representing ideas which involve changes over time because of its ability to implement motion, therefore concretising abstract temporal ideas (Rieber and Kini, 1991). If a learning task only requires learners to visualise fixed objects, then the use of static visuals would be sufficient. However, if the learning task requires the dynamic process, a situation in which an element is changing or evolving over time, it is better illustrated through animated visuals.

Most research supporting animated visuals in computer-based instruction were interested in the effects of animation on the learning of dynamic concepts instead of static concepts found positive effects of animated graphics on the learning of Newton's Law of Motion on the other hand, utilised animation to depict causal relationship of the scientific system such as how a bicycle tire pump works; how a braking system works; or how a human respiratory system works. Accordingly, animated graphics is well applied to learn dynamic abstract concepts that are difficult to visualize.

Some traditional visual aids, such as film and videotapes are available to show the motion and dynamic processes. But in many of these film and videotapes, the illustrations are separated by some period of time while students are watching them. Students are not likely able to absorb and process the learning material while sitting in a darkened room and it does not help the learning process. Thus, it would be an advantage if students have at their disposal the visual illustration. It would also be an advantage if students could control the pace and sequence of learning, and interact with the computers. Computers have the unprecedented capability of allowing students to interact with visual illustrations.

Interactive learning takes place in a learning situation where a learner and computer are actively and mutually responding to input/output and adapting to responses. There are three levels of interactivity according to the way in which users interact with computers. The 'reactive' model which is the lowest level of interactivity draws on behaviourist approach and simply refers to physically pressing the space bar to advance to the next step of program. The 'proactive' model which is based on a cognitive approach is the highest level of interactivity in which the learner is actively engaged in knowledge construction. Recent computer technology enables the instructional designers to develop computer-based or multimedia instructions with proactive model of interactivity. The model between reactive and proactive models is an 'interactive' model, in which the users can branch through the instruction depending on their inputs. They control the sequence of learning program. The animated graphics which are applied in computer-based instructions, involve the proactive model of interactivity, such as those in simulation or interactive 3-dimensional graphics in virtual reality technology.

According to Rieber Attention involves cognitive decisions regarding which information to attend to, given the fact that the environment contains far more information than any one person can handle at any given time. Interesting pictures gain and maintain learner's attention in instructional text. Good pictures motivate learners and encourage curiosity. Pictures including novelty and drama maintain learner's attention. In this sense, learners can be attracted to animated visuals that include dramatic and unique effects. One of the important roles of animation as an instructional tool is gaining students' attention. Gagne, Briggs and Wager (1992) described attention as the first event of instruction. Attention correlates with students' achievement more highly than the time-to-learn and poor learners have poor attention. The presentation of highly visual material is an effective teaching technique for arousing and sustaining student's attention.

Attention-gaining is an obvious, practical and rational use of animation. Rapidly changing visuals can be displayed on a computer screen to grab students' attention, such as cartoon figures, screen washes, and moving objects reinforcing the learning content. However, indiscriminate use of animation in computer-based instruction may hinder its positive effects on learning. Students' selective attention to animation is affected by instructional design method (Reiber, 1991). Only well-designed animation directing a selective attention can be an efficient aid to learning compared to static graphics. There have been many literatures on the use of animations in computer science related subjects in the past years. The intuition of computer scientists has led many to believe that animations must provide a learning benefit, but prior experimental studies dating back to the early 90s have provided mixed results.

A study on computer algorithms and data structure examined students learning about the algorithm by reading only a textual explanation and students learning about the algorithm using the text and interacting with an animation of the algorithm. Each group had an identical amount of time to study the algorithm, which was followed by a post-test including a variety of questions about the algorithm. The post-test was mostly questions about the procedural, methodological operations of the pairing heap, but it included a few concept-oriented questions as well. There was no significant difference in the two groups' performances on the post-test, but the trend favored the animation group.

Grissom, McNally, and Naps (2003) conducted research to measure the effect of varying levels of student engagement with algorithm visualisation to learn simple sorting algorithms. The three levels of engagement studied were: not seeing any visualisation; viewing visualisation for a short period in the classroom; and interacting directly with the visualisations for an extended period outside of the classroom. Results of their study revealed that algorithm visualisation has a bigger impact on learning when students go beyond merely viewing visualisation and are required to engage in additional activities structured around the visualisation. The researchers also state that it is important that visualisations used by students be consistent with algorithms in their textbooks, or else the visualisations may serve more to confuse them than to aid them.

English and Rainwater (2006) studied the instructional effectiveness of using animations to teach 32 learning objectives in an undergraduate operating systems course. The animations were created using Macromedia FlashTM and were employed as primary pedagogical tools during classroom instruction. In general, descriptions and diagrams served as the basis for reproduction in animated form. The animations were viewed in class by students, as presented as part of the lecture by the instructor at the appropriate point in class when the learning unit was discussed. Pretest scores were obtained by administering the pretest at the beginning of the semester. Posttest scores were acquired by selective inclusion of questions in regular examinations as pertinent to material covered in class. Findings of this study parallels previous research studies which indicate that animations are not effective in conveying information for all learning objectives; i.e. some learning objectives, especially those that are less procedural and more conceptual, are more difficult for students to learn from animation. A closer look at the learning objectives which profited from animation in this study reveals that animations were more beneficial in the sub-topics of processes, memory management and virtual memory. Animations which were designed for these units were generally procedural in structure.

In a study on impact assessment of a microprocessor animation on student learning and motivation (Ferens et al., 2007), the custom animation software was designed to teach second and third year computer engineering students in the microprocessing systems course at the University of Manitoba, Canada. The authors, with over the span of 13 years experience teaching the course, the difficulties and limitations with conventional lectures and visual aids led to the development of custom animation of the course material to provide an additional teaching modality to teach the complex and abstract subject matter more effectively. The animations software consists of the ability to create and/or modify microinstructions, create and/or modify macroinstructions, and animate the execution of instructions by showing address and data transmission juxtaposed against an animated clock. A postunit, mixed method survey was administered to students to reveal cognitive gains and motivational outcomes. Apparently, the use of animation, especially the 'water flowing through pipes' feature was shown to be a powerful component of the animation, and provides an element of visual learning that many students are finding to be critical in their ability to understand. The study also reported on substantial cognitive gains and modest motivational outcomes, reinforcing the animations' effectiveness yet again.

In the use of 3-Dimensional animation, Korakakis et al. (2009) studied the specific types of visualization (3D illustrated, 3D animation and interactive 3D animation) contributed to learning. The results indicated that multimedia applications with interactive 3D animations as well as with 3D animations do in fact increase the interest of students and make the material more appealing to them.

In summary, it can be stated that animation has mostly enhanced learning rather than detrimental to learning. In this case, the use of animation in computer science subjects have resulted with mixed results in terms of student understanding and performances, but it has mostly enhanced and improved learning. The difficult topics in some computer science subjects were visualised using animations which brought some cognitive gains as well as contributed to some motivational factors to students.

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Thanks to: Asia-Pacific Forum on Science Learning and Teaching

MODERN TEACHING METHODOLOGY AND INNOVATIVE PRACTICES

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Introduction

“Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world.” - Paulo Freire,

Education is to facilitate the kind of cultural shift that it needed to move us towards a sustainable and ecologically sound future that is underpinned by cooperation and equality, we need to re-evaluate and re-learn different ways of how we work within the world and how we interact and relate to it and each other. In order to achieve any of this, we need to educate ourselves and each other as we explore and experiment our way into a possible future.

Importance of Education

Education is an engine for the growth and progress of any society. It not only imparts knowledge, skills and inculcates values, but is also responsible for building human capital which breeds, drives and sets technological innovation and economic growth. In today's era, information and knowledge stand out as very important and critical input for growth and survival. Rather than looking at education simply as a means of achieving social upliftment, the society must view education also as an engine of advancement in an information era propelled by its wheels of knowledge and research leading to development.

Methodology

The traditional or innovative methods of teaching are critically examined, evaluated and some modifications in the delivery of knowledge is suggested. As such, the strengths and weaknesses of each teaching methodology are identified and probable modifications that can be included in traditional methods are suggested.

Traditional Teaching Method – An evaluation

In the pre-technology education context, the teacher is the sender or the source, the educational material is the information or message, and the student is the receiver of the information. In terms of the delivery medium, the educator can deliver the message via the “chalk-and- talk” method and overhead projector (OHP) transparencies. This directed instruction model has its foundations embedded in the behavioral learning perspective (Skinner, 1938) and it is a popular technique, which has been used for decades as an educational strategy in all institutions of learning.

Basically, the teacher controls the instructional process, the content is delivered to the entire class and the teacher tends to emphasize factual knowledge. In other words, the teacher delivers the lecture content and the students listen to the lecture. Thus, the learning mode tends to be passive and the learners play little part in their learning process (Orlich et

al.,1998). It has been found in most universities by many teachers and students that the conventional lecture approach in classroom is of limited effectiveness in both teaching and learning. In such a lecture students assume a purely passive role and their concentration fades off after 15-20 minutes. Some limitations which may prevail in traditional teaching method are

- Teaching in classroom using chalk and talk is “one way flow” of information.
- Teachers often continuously talk for an hour without knowing students response and feedback.
- The material presented is only based on lecturer notes and textbooks.
- Teaching and learning are concentrated on “plug and play” method rather than practical aspects.
- The handwriting of the lecturer decides the fate of the subject.
- There is insufficient interaction with students in classroom.
- More emphasis has been given on theory without any practical and real life time situations.
- Learning from memorization but not understanding.
- Marks rather than result oriented.

Innovative Tools

Multimedia Learning Process

I hear and I forget. I see and I believe. I do and I understand. - Confucius

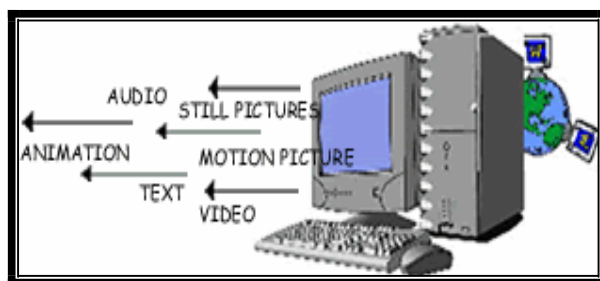
Multimedia, is the combination of various digital media types such as text, images, audio and video, into an integrated multi-sensory interactive application or presentation to convey information to an audience. Traditional educational approaches have resulted in a mismatch between what is taught to the students and what the industry needs. As such, many institutions are moving towards problem- based learning as a solution to producing graduates who are creative; think critically and analytically, to solve problems. In this paper, we focus on using multimedia technology as an innovative teaching and learning strategy in a problem-based learning environment by giving the students a multimedia project to train them in this skills et.

Currently, many institutions are moving towards problem-based learning as a solution to producing graduates who are creative and can think critically, analytically, and

solve problems. Since knowledge is no longer an end but a means to creating better problem solvers and encourage lifelong learning. Problem-based learning is becoming increasingly popular in educational institutions as a tool to address the inadequacies of traditional teaching. Since these traditional approaches do not encourage students to question what they have learnt or to associate with previously acquired knowledge, problem-based learning is seen as an innovative measure to encourage students to learn how to learn via real-life problem.

The teacher uses multimedia to modify the contents of the material. It will help the teacher to represent in a more meaningful way, using different media elements. These media elements can be converted into digital form, modified and customized for the final presentation. By incorporating digital media elements into the project, the students are able to learn better since they use multiple sensory modalities, which would make them more motivated to pay more attention to the information presented and retain the information better.

Pic.1 - Multimedia Elements

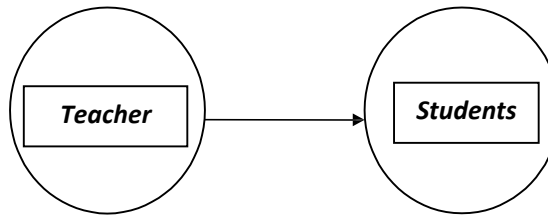


Creating multimedia projects is both challenging and exciting. Fortunately, there are many multimedia technologies that are available for developers to create these innovative and interactive multimedia applications (Vaughan, 1998). These technologies include Adobe Photoshop and Premier to create edit graphics and video files respectively, SoundForge and 3D Studio Max to create and/or edit sound and animation files, respectively. They can also use an authoring tool such as Macromedia Director or Authorware to integrate and synchronise all these media elements into one final application, add interactive features, and package the application into a distributable format for the end-user.

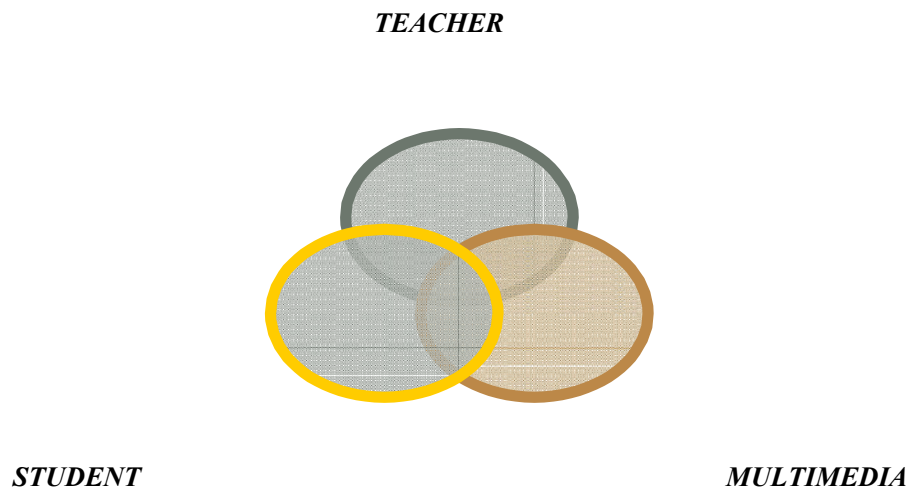
Another advantage of creating multimedia projects in the classroom setting is that when students create multimedia projects, they tend to do this in a group environment. By working in a group, the students would have to learn to work cooperatively and collaboratively, using their group skills and a variety of activities to accomplish the project's overall objectives.

Traditional and Multimedia Learning - The Difference

Pic.2 - Traditional Method – A One Way Flow



Pic.3 - Multimedia Learning – An Interactive Learning Process



Mind Map

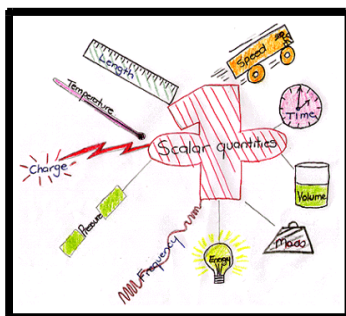
Mind maps were developed in the late 60s by Tony Buzan as a way of helping students make notes that used only key words and images, but mind map can be used by teachers to explain concepts in an innovative way. They are much quicker to make and much easier to remember and review because of their visual quality. The non-linear nature of mind maps makes it easy to link and cross-reference different elements of the map.

Mind Maps are also very quick to review, as it is easy to refresh information in your mind just by glancing once. Mind Maps can also be effective mnemonics and remembering their shape and structure can provide the cues necessary to remember the information within it. They engage much more of the brain in the process of assimilating and connecting facts than conventional notes.

The key notion behind mind mapping is that we learn and remember more effectively by using the full range of visual and sensory tools at our disposal. Pictures, music, color, even touch and smell play a part in our learning armory will help to recollect information for long time. The key is to build up mind maps that make the most of these things building on our own creativity, thinking and cross linking between ideas that exist in our own minds.

As the recent research point that any particular information explained with the help of graph charts make a high impact in the minds of the people and keeping this as the core aspect the teachers may try to picturize the concepts and show the same to the students

Pic.4 - An Example of Mind Map for Scalar Quantities

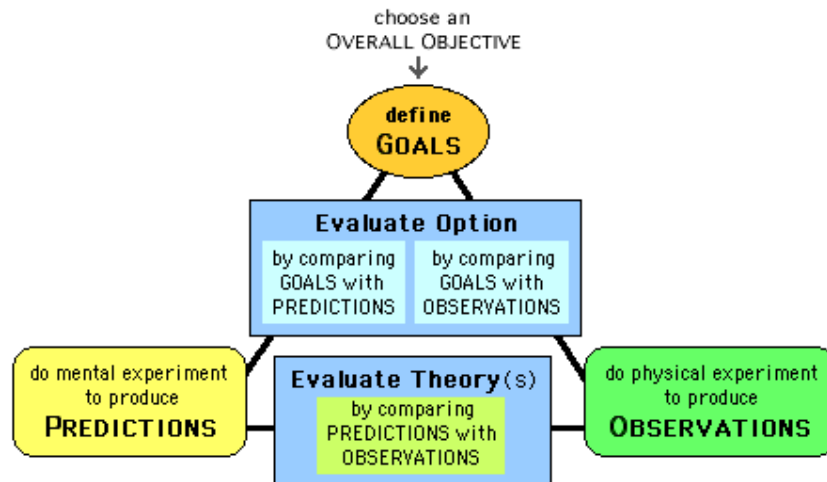


This would bring very high impact on the minds of the students about a concept

- Creates clear understanding
- PowerPoint can be used widely.
- Innovative thinking improves

Z to A Approach

This approach attempts to explain the application part of a particular concept first. The teacher should explain the application of a particular concept first and explain the effects of such applications. For example in management subject - motivation is explained in a manner that the organization get extensive benefits out of using some techniques like promotions and awards. So here the use of promotion is explained first and later students would get interest in knowing what are promotions and awards. The teacher starts explaining what is promotion and explains what motivation theory in management is. Another example we can try is that in accounting the Income statement and Balance Sheet can be explained first and later drawing their attention to double entry system of book keeping.



Strengths

- Makes a particular concept clear
- Students develop interest to know exactly the concept.
- Creates long lasting memory/correlation of a concept.

Conclusion

Across the world, information technology is dramatically altering the way students; faculty and staff learn and work. Internet-ready phones, handheld computers, digital cameras, and MP3 players are revolutionizing the college life. As the demand for technology continues to rise, colleges and universities are moving all sorts of student services, from laundry monitoring to snack delivery online. At Columbia University, a real-time Web-based service called Laundry View lets students log on to a Web-based system to see which washing machines are free before they head to the laundry room. They can monitor their wash and can even program the service to e-mail them when their load is done.

Technology is also changing the classroom experience. The classrooms at New York University's Leonard N Stern School of Business feature all sorts of conveniences for students and teachers. For instance, the room is wired with cameras for photographing whiteboards, so students can receive the images as digital files. In addition, tablet PCs, compact computers that allow you to write notes directly onto the screen with a special pen, replace the archaic projector. With the tablet technology allow professors to make notes on charts and spreadsheets and send them directly to their students' PCs and he will get a feedback from each student.

From the above, we can make out that the Information and communication technology has made many innovations in the field of teaching and also made a drastic change from the old paradigm of teaching and learning. In the new paradigm of learning, the role of student is more important than teachers. The concepts of paperless and penless classroom are emerging as an alternative to the old teaching learning method. Nowadays there is democratization of knowledge and the role of the teacher is changing to that of facilitator. We need to have interactive teaching and this changing role of education is inevitable with the introduction of multimedia technology and the spawning of a technologically-savvy generation of youths.

The analysis reveals some of the suggestions that the teaching community can practice in the classrooms. Ultimately the teaching people are satisfied when he could reach the students community with his ideas and views. So, teaching depends upon successful mode of communication and Innovation though we mean the changes that we propose to be included in our medium of communication or even inclusion of some other elements in communicating information.

The researchers recommend that the teaching would be highly effective if the teacher start to use the recent multimedia technologies like usage of computers extensively or some modifications in the conventional mode of teaching. The use of computers may be very well practiced in the environment where the use of such technology is highly possible, but there must be some sort of innovation which can also be practiced in an environment where such use of technology is on its way to growth. In those environments use of humor, role playing, words –words approach, Z-A approach are the ideas that can very well be practiced.

The researchers believe that the core objective of teaching is passing on the information or knowledge to the minds of the students. Any method using computers or modifying the existing conventional chalk-talk method are innovative if they ultimately serve the attainment of core objective of teaching.

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