ICT Tools for Education Process: Implementing E-Learning for Lower Education System

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Abstract - From the last few years, we have seen the changes in the lower education system and an exponential growth in software, healthcare and Entertainment with the use of Information and Communication Technology (ICT) Tools. This paper presents opinion on implementing of ICT Tools in the education by using E-learning resources. In the schools from past 4 years we can see the changes in education system by implementing activity based education for the students which makes them understand easier than manual process. Implementing ICT Tools makes the students learning easer with improving communication skills, Creativity, Logical Thinking and ability to grow. Usage of Internet, Mobiles, Projectors, Computers and etc makes student fall in love with these gadgets. Students get interest to study and there is no need to go to schools they can learn through online courses as they get certificates.

*Key Words***:** Information and Communication Technology Tools, E-Learning, Visual Teaching, Computer Labs

1. INTRODUCTION

E-Learning places a vital role in all the fields including education. Without Information and Communication Technology Tools in education system will be very difficult. Manual process of education provides only the knowledge of text books and information of the teacher [1]. There is no exposure to the technologies or creativity to motivate students to learn. Combination of Information and Communication Technology extend opportunities for education in regions of the world. Implementation of projectors and teaching process with the animated movies related to the education in all schools impact in students to learn quickly, and the visual picture stuck on their minds. Students suffer to study as they are addicted to play games, and fascinate on the online adventures games, Up to 80% of students study only when their exams are near. Number of failures in the exams is increasing and commits suicides due to pressure from parents to perform well in exams, opting courses without their knowledge and number of suicides are increasing day by day.

2. COMPARISON BETWEEN TRADITIONAL LEARNING AND E-LEARNING

Table -1: Comparison among Traditional Learning and E-Learning

Traditional Learning(Without ICT)	E-Learning(Using ICT)
Teacher-Centred instruction	Student-centred instruction
Factual, knowledge-based learning	Critical thinking and informed decision-making
Single-sense stimulation	Multisensory stimulation
Single-path progression	Multipath progression
Isolated, artificial context	Authentic, real-world context
Single media	Multimedia
Passive learning	Active learning
Isolated Work	Collaborative work
Information delivery	Information exchange

3. TYPES OF ICT TOOLS

1. Educational Learning
2. Web-based Learning
3. Mobile Learning
4. Classroom Equipment

1. Educational Learning: Education Learning is using social networking technologies for schooling purpose. It allows in disseminating correct information, countering inaccuracies, it can guide modelling professionalism and

it may engage novices and the public outside of traditional classrooms. Some examples are provided below:

- **Classroom 2.0:** Classroom 2.0 is an online community for people inquisitive about web 2.0 equipment and social media in education. Opportunity for educators to expand their professional mastering networks. It is a space for instructors to share what is running in their classrooms and help every different make the shift to coaching twenty first century literacy's [2].

- **Ning:** Ning lets in users to create their very own communities and social networks round specific pastimes with their own visible design, choice of functions and member data. Ning provides numerous core capabilities, including possibilities for monetization, integration with different social networks, chat, electronic, mail services, forums, polls and analytics.

- **Elgg:** Elgg became the first platform to bring thoughts located in commercial social networking platforms to education.

2. Web-based Learning: A set of online packages or services that enlarge learner's competencies to interact and collaborate with each inside the technique of searching, receiving, organizing and producing educational content. Few examples are:

- **Blog:** An Edublog is a weblog created for academic purposes. Edublogs achieve and support student and instructor studying via facilitating reflection, questioning by means of self and others, Blogs many be beneficial tools for sharing facts and guidelines among co-workers, providing facts for students, or keeping in contact with parents.

- **Wiki:** A wiki engine, being a form of a content control system, differs from other web-based totally systems such as weblog software. A typical wiki contains a couple of pages for the subjects or scope of the project and can be either open to the public or

limited to use inside an organization for maintaining its inner knowledge base.

- **Podcasting:** It is one of the present day mediums to emerge into the mainstream, is one of the leading edge technologies on this change. Podcasting gives the possibility for teachers to easily broadcast engaging audio content material, which college students can then pay attention to at anytime and anyplace they are. A student best need to enroll in a podcast feed and suddenly you can push educational content to them, rather than look ahead to them to come.

3. Mobile Learning: Mobile learning (m-learning) is schooling thru the internet or network using personal mobile devices, such as tablets and Smartphone's to obtain studying substances through mobile apps, social interactions and online educational hubs. It is flexible, allowing student's access to schooling anywhere, anytime [3]. Here are some examples:

- **Mobile:** Cell phones also help in providing communique between teachers and college students in case of any problem regarding their lessons or their academic clarifications. Mobile phones can be linked to net at any time and at any area which is positive to college students to browse something thru it associated with their studies.

- **iPad:** Students say that the iPad has made it less complicated to make notes on PDF documents, prepare work, and paintings at their very own pace. Teachers say that the iPad lets in for improved record maintaining of students progress. Assessments may be scored quickly, providing students with nearly immediate feedback. The iPad has expanded students overall performance in reading and studies report multiplied motivation [4].

- **PDA:** Personal digital assistants (PDAs) are generic devices commonly used in both personal and professional spheres of society, due to their affordability and portability [5]. The advantages of incorporating PDAs into medical schooling are to provide the alternative methods of learning, taking

notes, and updating relevant records with regard to their learning, as properly as lowering clinical errors [6].

4. Classroom Equipments: Smart classroom equipment is a solution designed to help instructors in meeting with new challenges and growing student's talents and performance. It helps the teachers to access multimedia content and statistics that can be used for coaching students more effectively. Some examples are supplied below:

- **Simple Projector:** The projector removes the strong bond between the teachers and dry erase boards, chalks to talk the statistics to the scholars approximately their lessons. By the use of projectors, instructors can use videos, slides and image examples to clarify all the doubts to the scholars of their subjects.

- **Interactive Projector:** The intuitive projector is a compact arrangement that helps convert any surface (existing projector screens, whiteboards, or divider surface) into an intelligent surface. An interactive pen will prove to be useful to draw point or snap just by touching the screen straightforwardly.

- **Printer:** Quality color printing is a key resource in a wide scope of classroom situations at all educational levels. It very well may be utilized to make intuitive visual guides for use in the classroom, which assists teachers with imparting complex ideas to understudies.

4. IMPACT OF VISUAL TEACHING ON STUDENTS

Implementation of Visual teaching helps the teacher to clarify, correlate and co-ordinate precise conceptions, understandings and appreciations and supports students to form learning more actual and motivating. Every individual has the tendency to forget. Appropriate utilization of visual guides assists with holding more ideas for all time. This provides easy way of teaching and learning. As survey tells number of students commit suicide due to obtain less marks in exams, pressure from parents to perform well in exams, in

terms of career choice and etc. All this problems are facing due to lack of knowledge in students, parents and teachers. Proper guidance of opting courses at class 12, student's career starts after their higher secondary education. Guidance regarding courses to choose respective of their interest at exact time makes student future bright and number of educator's increases in the world. Teachers should have enough knowledge on usage of ICT tools, for the 21 century all schools and colleges integrate into smart education system. Books contain literature and images which makes understand the story visually in imagination. Instead, video contains wordings and visual picture with the audio, this makes more effective to understand the content of story. Now in modern education classes are conducting through online. In future there may be exit only online classes.
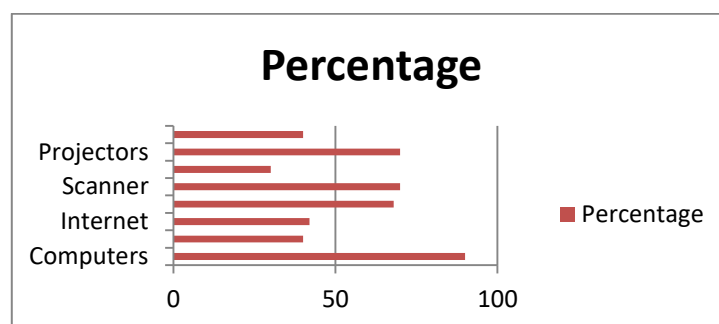

Figure -1: ICT Tools usage in schools in India

Figure 1 depicts clear picture on usage of ICT Tools in schools all over the country. Usage of Computers is 90%, Internet connection taken only 42% of schools, usage of projectors and scanner in 70%, Visual documentation conducting in 40% of schools. Smart boards implemented in 30% of schools, teaching classes using Multimedia Presentation in 68% [7].
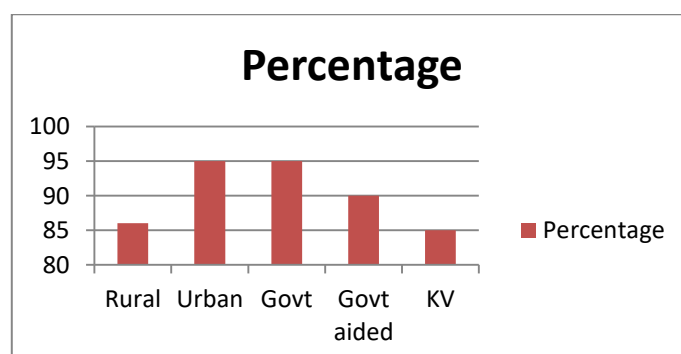

Figure -2: Installation of Computer labs in different category

Figure 2 Specifies allotments of Computer labs in different category. In Rural Area 86% of schools having computer labs, urban schools with 95%, 94% in Government schools, Government aided schools were in 90% and Kendriya Vidyalaya schools with 85% [7].

Computer instruction in schools assumes a significant job in understudies' vocation advancement. PC with the web is the most remarkable gadget that understudies can use to learn new aptitudes and a further developed rendition of current exercises. Colleges and Schools are the world over showing understudies the rudiments of PCs and the web on the web and disconnected. PCs help understudies to draw the imagination on the PC, for example, by utilizing a windows paint program.

Innovation is a major, modest and alluring apparatus. Technology pulls in youngsters to come to class, keeps them intrigued and holds kids in school. In the school's just PC room, understudies crush onto seats and on the floor, working in groups to make a slideshow on the inceptions of coal. Usage of computers minimizes the students drop out of schools.

5. CONCLUSION

The timing has in no way been higher or the use of generation to permit and improve getting to know at all levels, in all places, and for human beings of all backgrounds. Learning dashboards and collaboration and communication tools can help connect teachers and families with instant ease. Information Communication Technology (ICT) equipment make contributions to high great instructions since they have potential to growth students' motivation, join students to many data sources, support active in-elegance and out-class studying environments, and let teachers to allocate more time for facilitation.

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