Role of Technology In Education : A 21st Century Approach

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ABSTRACT

The future of India will be formed in the lecture hall. Whereas India has made great steps in refining the education system but much still remains to be complete. If you see the current situation then you will find that there is a torrent of advanced technology all over the world but our education system is not helping due to the absence of information and information of teachers, students, and the organization. The students have their own limitations, teachers have their owned and the organization is also confessing the fact that the education system is really in a poor form today. The aim of this paper is to skeleton how information technology can help to make an education system that is based on the ideologies of helping teachers, students, and management to be effective in what they do, improving the superiority and significance of teaching-learning process.

Keywords : Teaching-Learning Process, Information Technology, VOIP

I. INTRODUCTION

We will first match two technological development, which is energetic for implementing information technology. Way back in 1995, the computers looked very old form. These big giants were simply used for doing dispensation work and nothing more. But in the present situation, the computers are armed with the latest technology with very high processing speed. There has been a huge improvement in expressions of technology if you examine and compare the computers of 1995 with the present computers.

The similar grips were good for the mobile phone. Since in 1995 mobiles were expensive, bulky, high running cost, and with very few features. Now if you see the current day mobile they are as good as small computers. Again a theatrical and radical change of technology but for the betterment. Well so far so good. Now let us see how schools use to functioning during the 90's. Teachers use to explain a topic via blackboards. Students, on the other hand, could scarcely find any extra reference or substantial on that very topic simply. Teachers and textbooks were measured to be the source of information. Even the teachers used to stick to the matters of textbooks which was rarely updated and contains many errors. Many other difficulties also need to be addressed. We will argue them in the coming slides. Now if we see the current situation of school then we are sorry to say that not much has changed since the 90ies. We still are using blackboard; we are still using the substances of textbooks which are too old to needs informing. Teachers are mentioning to the same textbooks are the only source of information and facts accessible to most of the students as well as teachers. So we see that nearly nothing has changed ever since. So when a computer technology can modification and when a mobile technology can change why cannot the learning technology?

From the substantial point of view let us share some welfares of using information technology in education:

a) It induces technical, economic, technological, information and diverse literacy and global sentience.
b) It indorses creative thinking.
c) It improves effective communication which leads to teaming, collaboration and relational skills. Moreover, it persuades personal, social and public responsibility.
d) It leads to high efficiency which given the capability to plan and achieve results. It also gives you a sense of using real-world tools with actual, related, and high-quality results. Now assume a choice is taken to use technology in the field of education shifting the emphasis from old-style teaching to educational technology then a question quiet needs to be answered? How and where do we fit in? For this to answer, we need to discover the several ways of clubbing and implementing information technology in education.

Aim

a. To inspect the education situation in the current context.
b. To discover various possibilities of applying technology in education for the improvement of the students, teachers and in turn the society.

II. METHODS AND MATERIAL

A. THE TWO COMMUNICATION CHANNELS

The teacher and student act a significant role in education where the teacher acts as a facility center of information and knowledge and student acts as a learner of information and knowledge. The teacher after gathering information from specified sources like textbooks, personal notes, library etc communicates it to the students. That means communication plays a dynamic role in the distribution of information and knowledge from teacher to student. Now, if the teacher's, as well as student's scope of gathering information and knowledge, is limited how can you expect magic and wonders from teachers as well as students? So far we have discovered those features of the problems faced equally by the teacher and student. Now let us explore those aspects of problems which the teacher, students, and administration face as an individual.

A. The student's viewpoint (with technology less education) The students are facing the following difficulties in technology less educational environment:-
a) They are lost information.
b) They do not know accurately what to learn.
c) They go to classes that were canceled without any notice. All of this reduction the motivation level of the students.

B. The teacher's viewpoint (with technology less education) The teachers are facing the following difficulties in technology less educational environment:-
a) They do not identify what students are doing.
b) They have difficulty with dispersion information.
c) They are hard to spread for students.
d) A majority of teachers themselves are either not updated or under-qualified and due to lack of information & knowledge they do not benefit from new advances and continue to teach outdated material.
e) They have often protests of a huge workload.

C. The organizational viewpoint (with technology less education) The school administration is facing the following problems in a technology less educational environment:

a) Significant absenteeism of teachers in schools.
b) There do not appear to be mechanisms in place to ensure that the curriculum keeps pace with developments in the fields being taught.

c) There do not appear to be any established principle on the timely revision of textbooks. These above problems were identified when they have no idea of technology and its use in the field of education.

B. ASSISTANCES OF INFORMATION TECHNOLOGY IN EDUCATION

Now, in order to appropriateness the teacher, student and administration to use information technology in education we need to share the following assistances:

a. It encourages systematic, financial, technological, information and integrated literacy and global mindfulness.

b. It indorses creative thinking which induces the following:

a) Flexibility & managing complexity.

b)   Interest, creativity and risk taking.

c) High-order rational and sound reasoning.

a) It grows effective statement which leads to teaming, association and interpersonal skills. Moreover, it induces individual, community and civic responsibility.

b) It leads to high efficacy which given the ability to plan and achieve results. It also gives you a intelligence of using real-world tools with operative, applicable, and high excellence results.

C. EDUCATION WITHOUT TECHNOLOGY AGAINST EDUCATION WITH TECHNOLOGY

To calculate the assistances of using information technology we are separating education into two categories

If we communicate education without technology then these are the outcomes

a. It is Inactive.

b. It is formal.

c. It is teacher driven.

d. It is time dependent.

e. Content defined by others.

f. Score is given only after final evaluation.

g. Not all the students fully contribute.

Now, if we communicate education with technology then these are the outcomes

a. It is Active.

b. It is informal.

c. It is student driven.

d. It is not time dependent.

e. Content defined by students.

f. Individual contribution is measured.

g. Progress is accessed throughout.

h. All students fully participate.

III. RESULTS AND DISCUSSION

A. ACCEPTING THE TRUTH (EDUCATION THROUGH TECHNOLOGY)

Now suppose a decision is taken to use technology in the field of education shifting the focus from traditional teaching to educational technology then a question still needs to be answered? How and where do we fit in? For this to answer, we need to explore the various ways of clubbing and implementing information technology in education.

Ways of applying information technology in education We can find the following ways of applying Information Technology in education:

a. Becoming a volunteer in indorsing Information Technology in the field of Education by using blogs, forums, etc.

b. Adapting to e-learning techniques.

Becoming a volunteer in promoting information technology in education Now looking at this slide we can see how a volunteer can help himself and the

society in promoting information technology in education. Currently, we see the old face of the volunteer i.e., as a customer mugging up outdated text books. And the new face looks very promising in which the volunteer plays the role of a

a. Creator b. Contributor c. Communicator d. collaborator e. coordinator

a) Varying Teacher, Student and Directorial Viewpoint (with technology in education) When students have access to up-to-the-minute, current information, and when that information is shared with their peers and faculty, the learning experience changes dramatically. Teachers, who used to be the subject substance specialists and the deliverers of all content, will transfer more of the learning procedure and responsibility to students. Students then become responsible for understanding where to access information and how to cooperate in a Web-based environment. Students must request themselves: How do I learn? How can I use information and technology to get information? Such an knowledge prepares an separate to be a life-long learner, which is precarious for success in the workforce of tomorrow. So the whole learning pattern changes. On top of that, technology allows students to express themselves contrarily than they ever have before. Students are no longer limited to using a piece of paper and a pencil or pen, but instead have a unique online environment in which they can rapid what information they have been able to gather, adopt that data, and then participate it into their assignments.

b) Information Technology Tools A volunteer can find the following apparatuses valuable in endorsing information technology in the field of education: Blogs, Mediums, Societies, Webcast, PodCast, User Groups, Picassa (Google) and Flickr (Yahoo), W3Schools.com, Webopidia, Wikis, Web conferencing, Video Conferencing,

Chat, E-mail, Instant Messaging, Bulletin Board, VOIP, Data Conferencing, Shout Box, Image Board, YouTube, Slide Share A. Adapting to e-Learning Methods We have seen the volunteer part of applying information technology in the arena of education. Now see the managerial part of applying information technology in the field of education i.e., familiarizing to e-learning methods. A new model should be established or an current model could be used which contains the following features:

o A model for designing relevant curriculum a. A system that inspires the mass contribution of specialists, teachers, and students in shaping and updating curriculum in a timely manner.

o A model for authoring exercise substantial and teaching assistances   A system that :

a. permits teachers and students to remark and converse sections of text books.
b. Link additional sensible for additional study.
c. share talks, assignments, exercises, tests and so on.
d. allows progress of training substantial for helping teachers and managers update and improve their skills.

c) A model for providing contact to teaching aids
A structure where every teacher is able to access and use teaching aids established wherever, and by anyone.

d) A model for coaching students
A structure that can deliver flexible ways of teaching students, in the face of socio-economic pressures that make it difficult or students to attend regular classes, and systemic pressure that have resulted in a shortage of qualified teachers.

IV.CONCLUSION

Teachers still need to direct student learning events, but they must also put responsibility for education on the students. It is going to be an painful, but worthwhile transition. The amount of achievement should not simply be test marks, but instead, increased presence, attention and contribution. Once teachers see their students involved and excited about learning and creating thoughtful work, they will find it easier to make the evolution from actor to director. In order to educate students to be life-long learners and successful contributors to the new global market, educators must change the way they teach and the way students learn. We need to recall that if we want to help students reach a high level of capability and competitiveness, we have no choice but to make technology an integrated tool in the field of education.

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