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EDUCATIONAL TECHNOLOGY AND STUDENTS ACHIEVEMENTS

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ABSTRACT:

In the modern age the educational system is constantly being challenged to offer better education to more people, at the same time the technological development continually opens up new possibilities and methods of learning day by day.. The term educational technology is often associated with, and encompasses, instructional theory and learning theory.

The future of education is in the hands of the educational technologists and that includes all educators. Our world has left behind Toffler's Information Wave and is merging into something more advanced with a merging of the waves that will require insights like we have never seen before and educational technology will need to have more focus on being a process. The present paper is an attempt to share my views on the concept and purpose of educational technology, along with its impact on Students Learning and Achievements.



KEYWORDS: Educational Technology, Students Achievements.

INTRODUCTION

Instructive innovation (likewise called learning innovation) is the examination and moral routine with regards to encouraging learning and improving execution by making, utilizing and overseeing suitable mechanical procedures and assets. Instructive innovation envelops different frameworks utilized during the time spent creating human ability. Instructive Technology incorporates, however isn't restricted to, programming, equipment,

just as Internet applications and exercises. The reason for ICT in training is by and large to acquaint understudies with the utilization and operations of PCs and virtual products.

While instructional innovation is "the hypothesis and routine with regards to structure, advancement, usage, the executives, and assessment of procedures and assets for picking up," as per the Association for Educational Communications and Technology (AECT). In any case, there is still discussion on what these terms mean.

Instructive innovation can be considered either as a structure

science or as a gathering of various research premiums tending to principal issues of getting the hang of, educating and social association. It just goes for expanded productivity or viability of current practice, yet every now and again it goes for instructive change. While ICT in training can be extensively ordered in the accompanying ways

- ICT as a subject (i.e., PC considers)
- ICT as a device to help conventional subjects (i.e., PC based learning, introduction, examine)
- ICT as a managerial apparatus (i.e., instruction the board data frameworks/EMIS).

General Concepts of Educational Technology:

Educational technology is "the examination and moral routine with regards to encouraging learning and improving execution by making, utilizing, and overseeing proper innovative procedures and assets".

Instructive innovation is the utilization of both physical equipment and instructive theoretics. It envelops a few spaces, including learning hypothesis, PC based preparing, internet learning, and, where portable advances are utilized, m-learning. As needs be, there are a few discrete angles to portray the scholarly and specialized advancement of instructive innovation:

- educational innovation as the hypothesis and routine with regards to instructive ways to deal with learning
- educational innovation as mechanical devices and media that aid the correspondence of information, and its advancement and trade
- educational innovation for learning the executives frameworks (LMS, for example, instruments for understudy and educational program the executives, and training the board data frameworks (EMIS)
- educational innovation as back-office the board, for example, preparing the executives frameworks for coordinations and spending the board, and Learning Record Store (LRS) for learning information stockpiling and investigation.
- educational innovation itself as an instructive subject; such courses might be designated "PC Studies" or "Data and interchanges innovation (ICT)".

Benefits or role of educational technology in Modern Age

Educational technology is intended to improve education over what it would be without technology. Some of the claimed benefits are listed below:

- **Easy-to-access course materials.** Instructors can post their course material or important information on a course website, which means students, can study at a time and location they prefer and can obtain the study material very quickly.
- **Student motivation.** Computer-based instruction that can give instant feedback to students and explain correct answers. Furthermore, a computer is patient and non-judgmental, which can give the student motivation to continue learning.
- **Wide interest.** Learning material can be utilized for long separation learning and are open to a more extensive group of spectators.
- **Improved understudy composing.** It is advantageous for understudies to alter their composed work on word processors, which can, thus, improve the nature of their composition. As per a few examinations, the understudies are better at studying and altering composed work that is traded over a PC connect with understudies they know.
- **Subjects made simpler to learn.** Various kinds of instructive programming are structured and created to support kids and young people to learn explicit subjects. Models incorporate pre-school programming, PC test systems, and designs programming.
- **Students are urged to** utilize interactive media segments and to fuse the information they picked up in imaginative ways.

The use of internet in education has had a positive impact on the students, educators, as well as the educational system as a whole. Effective technologies use many evidence-based strategies (e.g., adaptive content, frequent testing, immediate feedback, etc.), as do effective teachers. In addition, positive attitudes toward technology as learning tool by parents, students and teachers can be developed.

- The Internet itself has unlocked a world of opportunity for students. Information and ideas that were previously out of reach are a click away. Students of all ages can connect, share, and learn on a global scale.
- Success at difficult technological tasks, as well as social networking such as Facebook can also lead to improved self-esteem.

- Students have different learning styles and using the various types of technologies available is a great way to accommodate learning styles. Providing remedial instruction for low-achieving students, and providing enrichment activities for students who successfully complete the regular lesson before students who require more time to learn can be possible.
- Using computers or other forms of technology can give students practice on core content and skills while the teacher can work with others, conduct assessments, or perform other tasks.
- Using technology in the classroom can allow teachers' to effectively organize and present lessons. Multimedia presentations can make the material more meaningful and engaging.

Technologies used in classroom:

There are various types of technologies currently used in traditional classrooms. Among these are:

- **Computer in the classroom:** Having a computer in the classroom is an asset to any teacher. With a computer in the classroom, teachers are able to demonstrate a new lesson, present new material, illustrate how to use new programs, and show new websites.
- **Class website:** An easy way to display your student's work is to create a web page designed for your class. Once a web page is designed, teachers can post homework assignments, student work, famous quotes, trivia games, and so much more.
- **Class blogs and wikis:** There are a variety of Web 2.0 tools that are currently being implemented in the classroom. Blogs allow students to maintain a running dialogue. They work as a tool for maintaining a journal of thoughts, ideas, and assignments, as well as encourage students comment and reflection. Wikis are more group focused to allow multiple members of the group to edit a single document and create a truly collaborative and carefully edited finished product.
- **Wireless classroom microphones:** Noisy classrooms are a daily occurrence, and with the help of microphones, students are able to hear their teachers more clearly. Children learn better when they hear the teacher clearly. The benefit for teachers is that they no longer lose their voices at the end of the day.
- **Mobile devices:** Mobile devices such as clickers or smart phone can be used to enhance the experience in the classroom by providing the possibility for professors to get feedback.
- **Interactive Whiteboards:** An interactive whiteboard that provides touch control of computer applications. These enhance the experience in the classroom by showing anything that can be on a computer screen. This not only aids in visual learning, but it is interactive so the students can draw, write, or manipulate images on the interactive whiteboard.
- **Digital video-on-demand:** It is like replacement of hard copy videos (DVD, VHS) with digital video accessed from a central server (e.g. SAFARI Montage). Digital video eliminates the need for in-classroom hardware (players) and allows teachers and students to access video clips immediately by not utilizing the public Internet.
- **Online media:** Streamed video websites can be used to enhance a classroom lesson (e.g. United Streaming, Teacher Tube, etc.)
- **Online study tools:** Tools that motivate students by making studying more fun or individualized for the student (e.g. Study Cocoa)
- **Digital Games:** The field of educational games and serious games has been growing significantly over the last few years. The digital games are being provided as tools for the classroom and have a lot of positive feedback including higher motivation for students.
- **Pod-casts:** Pod-casting is a relatively new invention that allows anybody to publish files to the Internet where individuals can subscribe and receive new files from people by a subscription. The primary benefit of pod-casting for educators is quite simple. It enables teachers to reach students through a medium that is both "cool" and a part of their daily lives.

Impact of Educational Technology (ICT/EdTech) on student achievement

1. The positive effect of ICT use in training has not been demonstrated:- As a rule, and regardless of thousands of effect contemplates, the effect of ICT use on understudy accomplishment stays hard to gauge and open to much sensible discussion.
2. Positive effect more probable when connected to teaching method :- It is accepted that particular employments of ICT can effectsly affect understudy accomplishment when ICTs are utilized fittingly to supplement an instructor's current educational methods of reasoning.
3. 'Computer Aided Instruction' has been seen to marginally improve understudy execution on various decision, state sanctioned testing in certain territories :- PC Aided (or Assisted) Instruction (CAI), which alludes for the most part to understudy self-study or instructional exercises on PCs, has been appeared to somewhat improve understudy test scores on some perusing and math aptitudes, despite the fact that whether such improvement associates to genuine improvement in understudy learning is easily proven wrong.
4. Need for clear objectives :- ICTs are believed to be less powerful (or inadequate) when the objectives for their utilization are not clear. While such an announcement would give off an impression of being undeniable, the particular objectives for ICT use in training, by and by, are regularly without a doubt, in all respects comprehensively or rather approximately characterized.
5. There is a significant strain between customary versus 'new' instructional methods and state sanctioned testing :- Customary, transmission-type instructional methods are viewed as increasingly successful in anticipation of state sanctioned testing, which will in general measure the consequences of such showing practices, than are more 'constructivist' educational styles.
6. Mismatch between strategies used to quantify impacts and kind of learning advanced:- In numerous investigations, there might be a crisscross between the techniques used to gauge impacts and the idea of the learning advanced by the particular employments of ICT. For instance, a few examinations have searched distinctly for enhancements in customary educating and learning procedures and information dominance as opposed to searching for new procedures and information identified with the utilization of ICTs. It might be that increasingly helpful investigation of the effect of ICT can possibly rise when the techniques used to quantify accomplishment and results are all the more firmly identified with the learning exercises and procedures advanced by the utilization of ICTs.
7. ICTs are utilized diversely in various school subjects :- Employments of ICTs for reenactments and displaying in science and math have been demonstrated to be viable, as have word handling and correspondence programming (email) in the improvement of understudy language and relational abilities.
8. Access outside of school influences sway :- The connections between in-class understudy PC use, out of class understudy PC use and understudy accomplishment are hazy. In any case, understudies in OECD nations revealing the best measure of PC use outside school are found in certain examinations to have lower than normal accomplishment (the assumption is that high PC use outside of school is lopsidedly dedicated to PC gaming).
9. Users accept that ICTs have a constructive outcome :- In concentrates that depend to a great extent on self-detailing, most clients feel that utilizing ICTs make them increasingly powerful students.

CONCLUSION:

It is necessary to take a broad view in order to understand and determine how Educational Technology impacts learning & achievement. This is because educational achievements are shaped not only by the way education is organised but also by the intelligence, socio-economic background of the learners, their socio-cultural environments, the changing skills and competencies that are necessary for employment, education and training, self-development and participation in society. This clarifies partly why non-formal learning, informal learning and adult learning are increasingly seen as crucial for the future of learning.

Implementation of EdTech leads to learning which is more interesting and less burdening. How efficiently can a teacher use this tool is of prime importance, in order to promote learning through EdTech. EdTech is not a substitute but a powerful tool for teacher to make learning possible. As technology has created change in all aspects of society, it is also changing our expectations of what students must learn in order to function in the new world economy. Students will have to learn to navigate through large amounts of information, to analyze and make decisions, and to master new knowledge domains in an increasingly technological society. They will need to be lifelong learners, collaborating with others in accomplishing complex tasks, and effectively using different systems for presenting and communicating knowledge to others. A shift from teacher-centered instruction to learner-centered instruction is needed to enable students to acquire the new 21st century knowledge and skills. EdTech has changed the role of Class Room teaching and has shrunk the world into small village.

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