



NEW INNOVATIVE TEACHING LEARNING PARADIGM IN CLASS ROOM

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Abstract:- As we are forced to live in the world of hybrid-values enduring the onslaughts of ‘enculturation’, one has to be necessarily up to date with the changing phenomenon of our existence. Truly it is a time of rapid change. Within a context of rapid technological change and shifting marketing conditions, the education system is challenged with providing increased educational opportunities without increased budgets. Many educational institutions are answering this challenge by developing distance education programmes. These types of programs can provide adults with a second chance at a college education, reach those disadvantages by limited time, distance or physical disability, and update the knowledge base of workers at their places of employment.

Keywords:*hybrid-values enduring , rapid technological change and shifting marketing conditions.*

INTRODUCTION

Many predictions have been made about the future of education, the demise of the classroom-based teacher, and an information technology lead revolution in schools, universities and organizations. This paper will look into the strategic role of interactive educational models those are designed to exploit current technological opportunities by placing the issues in context and challenging both new and traditional models.

COMPUTERS IN EDUCATION

Computers have now taken various new shapes affecting each and every walk of our life. Its’ latest area of monopoly is in the spheres concerning teaching and learning.

In recent years, educators have witnessed the rapid development of computer networks, dramatic improvements in the processing power of personal computers and striking advances in magnetic storage technology. These developments have made the computer a dynamic force in education, providing a new and interactive means of overcoming time and distance to reach learners. Computers affect educational organization in two ways. Firstly as a subject of study and secondly as an effective tool to be used for educational process.

The present paper purposes to deal with the scope of latter. In addition it deals with the contribution of Artificial Intelligence (AI). Computer applications for education fall into four broad categories;

Computer Assisted Instruction (CAI) – uses the computer as a self-contained teaching machine to present discrete lessons to achieve specific but limited education objectives. There are several CAI

modes, including: drill and practice, tutorial, simulations and games, and problem-solving.

Computer Managed Instruction (CMI) – uses the computer’s branching, storage, and retrieval capabilities to organize instruction and track student records and progress. The instruction need not be delivered via computer although often CAI (the instructional component) is combined with CMI.

Computer Mediated Communication (CMC) – describes computer applications that facilitate communication. Examples include electronic mail, computer conferencing, and electronic bulletin boards.

Computer-Based Multimedia-Hyper Card, hypermedia, and a still-developing generation of powerful, sophisticated, and flexible computing tools have gained the attention of distance educators in recent years. The goal of computer-based multimedia is to integrate various voice, video, and computer technologies into a single, easily accessible delivery system.

It would be logic to present the theoretical information as it is hoped to provide sufficient background and confidence to develop a model program for Computer Assisted/Aided Instruction (CAI).

OVERVIEW OF CAI

Computer is fundamentally a tool. It is incapable of doing anything on its own. It has neither inborn wisdom nor mind on its own. It is no initiative. It has no inherent ability to learn or teach, however, it has well known fact that computer is a powerful tool for collecting, processing & presenting information. Hence, computer appeals instantly to the teacher, whose task is also to collect process and disseminate information. A computer can be made as a teacher or trainer by means of courseware. The ‘courseware’ is nothing but the software specially designed for teaching purposes. Using graphics facilities, the display device can be simultaneously used as a textbook, black board and slide projector. Moreover, it is also endowed with the interactive facility.

Computer is basically a medium in teaching and learning process. It can never make the teacher position obsolete. In fact, its existence in curriculum mainly depends on teachers in so many ways. The large-scale production of computer based learning material will require very large number of teachers. Hence, many teachers will have to become designers and developers of materials, rather than being more deliver of course material. So, the terminology CAI is used. This abbreviation CIA can be expanded in two ways such as, Computer Assisted instruction and Computer Aided Instruction. The two words Assist and Aid are significant. They refer to the computers auxiliary role. The word ‘instruction’ is also significant it indicates a bias towards the teaching aspects. On the other hand the term CAL – Computer Assisted / Aided Learning focuses on the learning aspect of the process. Here the terms used to refer CAI are Computer Based Instruction / Learning [CM(I/L)] CBI defines the automated learning from the perspective of the learner. CDI and CMI explicitly signify a more active and controlling role to the computer. Instead of merely presenting material and questions, collecting and processing, the learner responses, the computer actually makes decisions about the shape and structure of the material to be presented to the learner.

It studies the learner responses, the time taken through the sessions, and similar factors.

ROLE OF INTERACTIVE EDUCATIONAL MODELS

It is not feasible to discuss the role of interactive educational models (multimedia) in the future of education without paying some attention to the future of education without paying some attention to the future of education (at all levels) itself. The issues are broad and varied without any evidence to date that there is a foolproof solution which educators may use. Moreover, there is little sign of agreement amongst educators regarding the future structure and function of educational institutions servicing the different sectors. To predict the role of multimedia in such an uncertain climate would be ambitious to say the least. However, by adopting a suitable set of principles, educators are able to set themselves some viable targets.

When dealing with the role of multimedia in education, it is obvious that title useful information will result from debate that becomes focused on technological ability rather than pedagogical strategy; achievement of machines, software and programmers rather than achievement of learners and mentors;

and quality of technological wizardry rather than quality of learning experiences and outcomes. That is not to say that the technological parameters and achievements are not important. They are vital, as long as we have suitable educational strategies, goals, experiences and outcomes at which they can be focused.

Therefore, when examining the driving forces behind the required transformation, interactive media can be seen as both a contributing factor in creation of the demand, and at the same time, an important part of the solution that needs to be employed. The background so far, however, now gives us a foundation to discuss the potential future of interactive media in education.

Instructional Methods and Technologies have always gone hand in hand

For Example

1.Oral tradition for centuries:

- i)Teacher was the only source of information, “teacher talk.”
- ii)Teacher served as a role model
- iii) Teacher was the primary resource to meet individual learning needs.

2.Printing Press Discovered in 16th century:

- i) Books provided more role models and multiple perspectives.
- ii) Exposure to books demanded that learners use critical thinking to resolve conflicting interpretations.
- iii) Teachers helped learners identify books, develop critical thinking skills, interpret multiple “voices” etc.
- iv) Books empowered those who could read and had access to books to learn on their own, rather than be dependent on a teacher to “tell” them.

3.Photo and Video were discovered in the 19th Century:

- i) Visuals transcended language and literacy problems.
- ii) They enabled distance education.
- iii) They improved learning where verbal description was not adequate.
- iv) Learners used a new type of critical thinking to evaluate visual information such as advertising and photojournalism.
- v) Teachers could select print, photo, video or some combination to best to teach content.

4.Digital and Interactive Media has been developed in 20th century:

- i) New media enhances visual and verbal content.
- ii) It doesn’t replace earlier media.
- iii) New media allows dynamic alteration of instruction based on learner responses.
- iv) The teacher’s role can shift to “guide on the side” from the traditional “sage on the stage”.
- v) Active learners create; integrate ideas, approach learning according to their interests and learning styles.

Interactive multimedia

Interactive multimedia has been called a “hybrid technology”. It combines the storage and retrieval capabilities of computer database technology with advanced tools for viewing and manipulating these materials. Multimedia has a lot of different connotations, and definitions vary depending on the context. For the purpose of this Guide, in the context of upper secondary and post secondary education, interactive multimedia is defined by three criteria;

- ❖ Interactive Multimedia is any package of materials that includes some combination of texts, graphics, still images, animation, video, and audio;
- ❖ These materials are packaged, integrated, and linked together in some way that offers users the ability to browse, navigate and analyze these materials through various searching and indexing features, as well as the capacity to annotate or personalize these materials;
- ❖ Interactive multimedia is always “reader-centered”. In interactive multimedia, the reader controls the experience of reading the material by being able to select among multiple choices, choosing unique paths and sequences through the materials. One of the key features of interactive multimedia is the ability to navigate through material in whatever ways are most meaningful for individual users.

Interactive multimedia is synonymous with another frequently used term; hypermedia. Hypermedia is the multimedia version of the term hypertext. A hypertext is defined as any non-sequential, electronic text, assembled not as a seamless sequence of material with a beginning, middle and

end, but as a web of interrelated chunks' of text. In a hypertext, the reader controls the sequence of reading by choosing how to navigate among these chunks of text by various electronic links.

The term hypermedia" was coined to mean a hypertext that uses multiple media. In other words, hypermedia is a collection of multimedia materials with multiple possible arrangements and sequences. Hypertext and hypermedia are "electronic" concepts that can only exist in a computer-based environment. Only in a computer – based environment materials can be linked and organized in multiple ways simultaneously, and searched, sorted and navigated in hundreds of possible combinations by different users.

These new kinds of multimedia resources consequently can serve multiple purposes for many different users. Teachers could use such a text as a resource tool, gathering background information for class lectures and discovering primary documents to enrich assignments; similarly, students, at all levels of capability could use such a resource to begin the discovery process.

USE OF INTERACTIVE MULTIMEDIA IN EDUCATION

1. Interactive tutorials that teach content by selecting appropriate sequencing of material based on the ongoing entry of student responses, while keeping track of student performance.
2. Electronic presentations via re-proposing videodiscs or other electronic presentation formats.
3. Computer simulations of things too dangerous, expensive, offensive, or time sensitive to experience directly.
4. Virtual reality, where 3- dimensional experiential training can simulate real situation.
5. Exploratory hypertext software (i.e., encyclopedias, databases) used for independent exploration by learners to complete research for a paper, project, or product development. They may use IMM resources to collect information on the topic or use multimedia components to create a product that melds visual, auditory, or textual information effectively to communicate a message.

INTERACTIVE MULTIMEDIA IN EDUCATIONAL ENVIRONMENT

Multimedia programs bring to education the extraordinary storage and delivery capabilities of computerized material. This is especially important for schools, libraries, and learning institutions where books are difficult to obtain and update. Multimedia is a powerful and efficient source for acquiring learning resources. Multimedia can also provide educational institutions access to other kinds of inaccessible materials. Interactive multimedia programs enable the user to utilize the materials through a wide variety of powerful linking, sorting, searching and interpreting activities. Each of these activities can be made to reinforce and inculcate various intellectual skills, in addition to satisfying certain cognitive needs for quality learning, such as the ability to follow through links at the immediate moment when curiosity is aroused, and the ability to view different forms of the same information side-by-side.

By allowing users to control the sequence and the pacing of the materials, multimedia packages facilitate greater individualization in learning, allowing students to proceed at their own pace in a tailored learning environment. Furthermore, interactive multimedia can be a powerful learning and teaching tool because it engages multiple senses. Students using multimedia are reading, seeing, hearing, and actively manipulating materials. As one educator enthusiastically put it, as humans, we seem hard-wired for multiple inputs. Consider that we remember only about 10% of what we read; 20% if we hear it; 30% if we can see visuals related to what we're hearing; 50% if we watch someone do something while explaining it; but almost 90%, if we do the job ourselves—if only as a simulation. In other words, interactive multimedia—properly developed and properly implemented—could revolutionize education.

Although "revolutionize" may be a bit optimistic, interactive multimedia is a promising medium for reinforcing, extending and "supplementing" what goes on in the classroom with print materials, lectures and classroom discussions.

Incorporation of Multimedia in Educational Contexts

Below are listed five hypothetical scenarios and possible uses for the integration of multimedia materials in to educational contexts.

Building a Library-Based Multimedia Resource for Teachers

As a teachers' resource most directly it can be a resource for teachers who are gathering background and contextual material for their courses. With multimedia resources, teachers can efficiently research and design lectures and assignments, as well as generate ideas and texts for clusters of materials. Multimedia can also serve as a teachers' resource by providing a tools for enhancing lecture and classroom presentations.

Building a Library-Based Multimedia Resource for Students

In addition to interactive reference tools, multimedia programs such as electronic texts, as well as general and focused educational packages, can provide valuable enhancements to the library collection. Even before teachers begin incorporating the use of multimedia into classroom contexts, their students can begin using library-based multimedia for research papers and writing assignments, or as tools in preparing for examinations, or even for pleasure and curiosity.

Using Multimedia Texts as Supplementary Curricular Materials for Particular Courses

The level of impact that necessitates the least amount of revision in teaching style and classroom materials is the implementation of multimedia as a supplementary curriculum to the one covered in class. In this scenario, students are using multimedia programs to extend discussions and assignments in class on an informal basis.

Using Electronic Texts as Tools for Teaching and Reinforcing Analytic and Reading Skills

Teachers can also work with students, using electronic texts, to reinforce close reading skills, using search and find functions to trace thematic and formal patterns in literature, or to engage in rhetorical analysis of sophisticated political and philosophical documents.

Multimedia packages become more common, some teachers are looking to multimedia as a major structuring device for their classes. It is at this level of integration that one would consider using an historical simulation, structuring at least a whole unit, if not a whole course, around the materials provided in a information rich multimedia package.

CONCLUSION

The future of interactive media in education, it is separated from the issues of technology that tend to mystify discussion and place it firmly in the sole grasp of those that are highly technologically capable, is that of communication tool. Its dimensions and capabilities will evolve and expand at the same time as the potential to author becomes more widely accessible. The potential for students of all ages to author as part of a creative educational programme that is based on achievement of goals and competencies that is based on achievement of goals and competencies rather than time served will assist educators to shift from teacher to facilitator and mentor. Interactive communication tools will transform our capability to embraces an educational paradigm that deals with learning as a vital, fulfilling, and continuing part of life at home and in the workplace as well as within educational institutions.

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