



THE ROLE OF MULTI- MEDIA IN DAY TO DAY EDUCATION AND ITS TECHNOLOGY

DR. V. SIVA PRASANNA KUMAR

Assistant Professor in English
Sri Sarvodaya Degree & PG College,
Nellore -524003. (AP) INDIA

ABSTRACT

Multi - Media plays a very important role in day today technology .The motion picture is destined in the present day education system and all the students are attracted towards multi media . It is a boon in educational and education. The use of technology in Education is not a new concept .The idea took birth and received wide currency almost a hundred years ago. Thomas Edison who projected the first motion picture in the year 1896 at Koster & Biial's Music Hall in New York City and whose innovations include the incandescent electric bulb and the phonograph said the following about the future of motion picture:” The motion picture is destined to revolutionize our educational system ,and in a few years it will supplant largely ,if not entirely the use of textbooks”.

INTRODUCTION

In the same vein William B. Levenson the author of teaching Through Radio (1945) says, “a radio receiver will be as common in the class room as the black board Radio instruction will be integrated into your school life .Wilbur Shramm in his 1964 book mass media and national development: The role of information in the developing countries writes, ”What if the full power and vividness of television teaching were to be used to help the schools develop a country's new educational policy He is also the Process and Effects of mass Communication (1971)which he co-authored with D.F.Roberts.

The Use of Computer Technology in Education

DR. V. SIVA PRASANNA KUMAR

1Page

Patrick Suppes in his article “Computer Technology and the Future of Education” (1968) visualizes the image of a student sitting at a variety of terminal gear—as it is called in the computer world. These terminals are used to provide the student with individualized instruction. He receives information from audio messages, from type-written messages and also from visual displays ranging from graphics to complex photographs. In turn he may respond to the system and give his own answers by using the keyboard on the typewriter. . (Suppes 42)

He goes on to present three possible levels of interaction between the student and computer program—1. Individual drill-and-projective practice systems which are meant to supplement classroom instruction 2. tutorial systems which do both the concept as well as develop skill in its use and 3. dialogue systems which enable the student to participate in a dialogue, conversation with the computer. (Suppes 42-44)

Cognitive Theory of Multimedia Learning

According to Mayer’s Cognitive Theory of Multimedia Learning (CTML) there are five basic steps (the order of which always remain arbitrary) to understanding. The first step deals with the selection of relevant words. In other words it involves paying attention to some and not at all of the presented words. The second step involves the selection of relevant images that is attention is paid to part of the illustrations and animations presented. Step three deals with organizing the already selected words in such a way to build connections among the words following the path of cause-effect linkages. This is followed by step four—organizing the selected images and building structures and making a sense to the learner, again following the cause-effect linkages. Finally, in step five the word-based and image-based representations are integrated to allow for making connections and finally making “sense”.

Mayer identifies two goals of Multimedia Learning—1. Retention and 2. Transfer. Retention deals with remembering the material one has encountered and be able to reproduce or recognize it when necessary. Transfer deals with the ability to understand the material and adopt to other newer situations. A good example of a Retention test would be write down all the names of the cities mentioned in the article you just read. of the homeless in big cities.”

Principles of Cognitive Theory of Multimedia Learning

So then what is the relationship between pictures and words? Are they very different? Is presenting a piece of information in pictures different from presenting it in words? Do words make more sense, or pictures or combination of both? And how so? The Multimedia design principles of CTML attempt to answer the questions.

1. Multimedia Principle:

According to Mayer's Multimedia Principle a combination of words and pictures referred to as Multi-codality can augment learning. There is considerable empirical evidence to suggest that "students learn better from words and pictures than from words alone."(mayer . et al.19910

2 .Contiguity Principle:

The Contiguity Principle concerns with keeping related material closely together inorder to improve the learning experience .It is of 3 types. (1)Spatial Contiguity Principle (2) Temporal Contiguity Principle and (3)Segmenting

Spatial Contiguity

According to the Spatial Contiguity Princiople,"students learn better when corresponding words and pictures are presented near each other than far from each other on the age or screen .In other words Retention and Transfer results are consistently better when text and animation or picture a re "integrate d and not "separated" when text and animation or picture are "integrated and not "separated"

Temporal Contiguity Principle:

In a comparative study of pictorial animations following sentence narration and animation in parallel with narration done by Mayer the later proved to be more consistent and significantly superior .Based on latter proved to be more consistent and significantly superior .based on this Mayer it is concluded that students learn better when corresponding words and pictures are represented simultaneously rather than successively.(Mayer et.al 19990

Segmenting Principle:

This principle of multimedia learning seeks to emphasize the fact that the material presented be in paced segments and at a single large unit .In other words the advancement of the presentation must be learner-friendly and must be able to be controlled by the learner. Thus this principle underscores the idea that students learn better from a multimedia lesson if it is presented in learner-paced segments and not as a single continuous unit.(Mayer 2005)

3) Modality Principle

The modality principle deals with the idea that students learn better when words in a multimedia message are presented as spoken text rather than printed text .This combination of animation and narration works to superior to animation accompanied by on-screen text. .Thus the modality principle states that students learn better from animaton and narration than from animation and on-screen text (Mayer 2005)

4. Coherence Principle

Type 1-visual Harp and Mayer in their 1998 article “How seductive Details do their Damage :A theory of cognitive interest in science learning made students read expository passages with interesting but irrelevant adjuncts. Student learning is hindered when interesting bur irrelevant words and pictures are added to a multimedia presentation. Harp and Mayer conclude that students learn better when extraneous material is excluded rather than included.

Type 2-Visual-AUDITIVE

Moreno and Mayer also insist that student learning presentation. They state retention and transfer is undoubtedly better when extraneous sounds ,including background music ,is avoided thus ,,again ,students learn better when extraneous material is excluded rather than included.

5. Redundancy Principle

In formulating Redundancy Principle ,Mayer (2030)attempts to provide that identical information presented in two or more different forms is not helpful for learning .The bottom line is the students learn better than from animation and narartion than from animation ,narration and text.

Three very important principles need to be born In mind when presenting multimedia lessons.

6. Personalization Principle: Students learn better from multimedia lessons when words re in conversation al style rather than formal style Voice Principle Students learn better when the narration in the multimedia lessons is spoken in a friendly human voice rather than a machine voice.

Image Principle: Students do not necessarily learn better from a multimedia lessons when the speaker’s image is added to the screen.

7. Pre-Training Principle : The Pre-Training principle emphasizes the idea that the knowledge of basic concepts and terms helps reinforce the multimedia –based learning.

These are the major principles of multimedia learning the need to be borne in mind when designing and operating multi- media lessons.

CONCLUSION:

Multi Media plays a vital role in day today life of a human being already selected words, the selected images and building structures altogether make the Multi-media as a strong foundation to improve the living conditions.

WORKS CITED

1. Harp Shanon F. and Richard E .Mayer .”How seductive details do their damage :A theory of cognitive internet in science learning “journal of educational psychology 90.3(1998)414.
2. Levenson William B. Teaching through Radio . ”New York Farrar & Rinehart 1945.
- 3 .Mayer Richard E. Applying the science of learning : Evidence based principles for the4 design of multimedia instruction. American psychologists 63.8 (2008); 760.
4. Mayer .R69.-182.
- 5 .Mayer Richard E. “The promise of multimedia learning using the same instructional design methods across different media. “Learning and instruction 13.3 (2003):125-139.
- 6 .Mayer Richard E. and Richard B Anderson” Animations need narrations : An experimental test of a dual-coding hypothesis ”Journal of educational psychology83.4(1991):35.8.
- 8 .Moreno Roxana and Richard Mayer A coherence effect in multimedia learning :The case for minimizing irrelevant sounds in the design of multi -media instructional messages ,”Journal of Educational psychology 92.1(2000):117.
9. Schramm Wilbur. Mass Media and National Development: ,1964.
10. Suppes ,Patrick. Computer