
ENHANCE OF MULTIMEDIA TEACHING IN ZOOLOGY

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Abstract

Multimedia in education is designed to enable the teaching and learning to acquire problem solving and decision making skills which can be developed through interactive multimedia. Multimedia includes computer and some electronic devices, which create memory, transmit and retrieve textural graphic, images, animation and auditory networks of information. Multimedia the most widely needed destination is a combination of many media with teaching and learning facilities. Mostly schools and colleges are using the multimedia application in teaching and learning of Zoology. Sound is perhaps the most sensuous element in the interactive multimedia it can provide the listening pleasure with lively in zoology teaching. Video in interactive multimedia combines that effectively visual and oral information. Multimedia ensures flexible learning and teaching in zoology, the pattern of multimedia interaction among teachers, learners and resources. The nature of multimedia provides immediate comprehensive feedback to science pupil, but particularly zoology students. It enhances effectively in zoology teaching and as well as it improves quality of education. It develops zoological activity as content mastery learning; it stimulates the student's curiosity and encourages zoology learning through various senses. Multimedia approach improves the quality in zoology teaching and learning. Thus, in this paper an attempt has been made to discuss the role of multimedia in teaching zoology.

Introduction

Multimedia teaching is designed to enable the learner to acquire problem solving and decision making skills which can be developed through multimedia. Multimedia includes a class of computer system which create store, transmit and retrieve textural graphic and auditory networks of information (Cazwiski, 1992).Multimedia, the most widely needed destination is combination of many media with multimedia facilities. Many schools and colleges are using the the multimedia application in teaching and learning zoology. Sound is perhaps the most sensuous element in the multimedia it can provide the listening pleasure of zoology word. Video in multimedia combines visual and oral information. Multimedia teaching ensures flexible learning, the pattern of interaction among learners, teachers and resources. The nature of multimedia provides immediate comprehensive feedback to zoology students. It enhances zoology learning and as well as it improves quality of science education. It develops zoology activity as mastery learning; it stimulates the students curiosity and encourages zoology learning through various senses. The multimedia approach improves the quality in zoology teaching.

It is a recognized fact that a large part of the human brain tends to be visual. The brain readily perceives still or moving images and many learners prefer processing and interpreting raw sound rather than cope with the verbal description of sound. Hence many learning tasks can therefore be more efficiently catered to by multimedia methods rather than the traditional verbal ones. If conventional verbal information presentation is replaced by multimedia which appeals to the learner's multiple modalities, increased learning will invariably result.

The world of computers is getting easier to the world of human beings. As the hardware develops, computer displays become more realistic and cheaper. The computer with its virtually instantaneous response to the student input, its extensive capacity to store and manipulate information its unmatched ability to serve many individual students simultaneously is widely used in instruction. The computer has the ability to control and manage a wide variety of media and learning material – films, filmstrips, videos, slides, audiotapes and printed information.

The most striking innovation in teaching of zoology is the application of multimedia in zoology class room. Multimedia based teaching improves student's achievement and retention in zoology. The multimedia interface with the student is possible through computer, laptop and other media. When students are learning through multimedia the acquired retention is better. 'Multimedia' is a buzzword today in the field of computer. Multimedia involves combining text, sounds, still pictures and video etc.

Multimedia Teaching

Multimedia is considered as mutual action between the learner, the learning system, and the learning material. Numerous studies have found that interactivity has a strong positive effect on learning (Bosco, 1986, Fletcher, 1989, 1990, Stanfford, 1990). For example, Bosco (1986) reviewed 75 learning studies and found that learners learn faster, and have better attitudes toward learning when using multimedia. 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. 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. Multimedia is always "reader-centered". In 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 multimedia is the ability to navigate through material in whatever ways are most meaningful for individual users.

Enhance of Multimedia and Zoology Teaching

Zoology is a field of knowledge which has been changed and is changing. Zoology is an attempt to construct a testable mental model of some aspect of reality (Tweney, 1987). What distinguishes scientific thinking from other kinds of problem solving, inferential and deductive reasoning is testability. According to Tweney (1987) these mental models are constructed representations of the world; they can be verbal, mathematical, or visual in nature or some combination of the three models are based on existing schema structures in one's knowledge

base, which only changes due to the reciprocal processes of assimilation and accommodation. Informal reasoning processes such as analogy, metaphor and imagery, rather than formal processes of logical reasoning, are responsible for the ability to extend known information to new situations. Hence the multimedia based learning strategies should focus on informal reasoning rather than the formal processes.

In teaching of zoology, it has generally been found that more traditional methods of textbook and lecture instruction are not always the best way to teach (Dykstra, Boyle & Monarch, 1992). An instructional design based on interactive multimedia is valuable in science if the design promotes the construction or reconstruction of knowledge. Zoology instruction should strive to involve students as active participants in constructing their own theoretical frameworks.

Multimedia teaching encourage students to work in groups, express their knowledge in multiple ways, solve problems, revise their own work, and construct knowledge. The advantages of integrating multimedia in zoology classroom are many. Through the participation in multimedia activities, students can learn:

- To construct their knowledge based on experience
- The impact and importance of different media
- The significance of presentation and speaking skills

There are, however, some constraints to using in multimedia in zoology classroom, including:

- Technological resources, both hardware and software
- Technological skills, for both the students and teacher
- The multimedia has the capacity to deliver large amounts of materials in multiple forms, and to deliver them in an integrated environment that allows users to control the reading and viewing experience in science.

Multimedia teaching enhances in 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 teaching is a powerful and efficient source for acquiring learning science resources. Enhance of Multimedia can also provide educational institutions access to other kinds of inaccessible materials, such as hard to find historical films, rare sound recordings of famous speeches, illustrations from difficult to obtain periodicals, and so on. Multimedia can put primary and secondary source of zoology materials at the fingertips of users in even the remotest locations from major research facilities.

Furthermore, multimedia teaching usually integrate some combination of orientation tools, such as timelines, graphs, glossaries, and other pedagogical guides. These kinds of tools further

point to the third major benefit of multimedia: the personalization or individualization of the learning experience in zoology class room.

Conclusion

The long history of education has been dominated by both the spoken and written words. Generally, teaching in schools and other educational institutions is extremely verbal. Multimedia can be a powerful teaching tool in zoology because it engages multiple senses. Students using multimedia are reading, seeing, hearing, and actively manipulating materials. Multimedia teaching enables the user to manipulate these materials through a wide variety of powerful linking, sorting, searching and annotating activities. Each of these activities can be made to reinforce and inculcate various intellectual skills, in addition to satisfying certain cognitive needs for teaching zoology.

References

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