Research Paper

Education

Role of Multi Media in Education

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ABSTRACT   *Multimedia as product and application can have potential roles in enhancing learning. Certainly multimedia resources are increasingly embraced in education. To advance the use of multimedia technology, faculty should be convinced of its importance relevancy and practicality.*

KEYWORDS:

Introduction

Multimedia in Education has been extremely effective in teaching individuals a wide range of subjects. Multimedia is changing the way we communicate with each other. The way we send and receive messages is more effectively done and better comprehended. While a lecture that integrates pictures or video images can help an individual learn and retain information much more effectively. Using interactive CD-ROMS can be extremely effective in teaching students a wide variety of disciplines, most notably languages and music there is certainly no lack of vision within educational communities concerning the central role and importance of ICT in the educational contexts of the future. How're Hoffman (2001) suggested that successful implementation of ICTS need to address five interlocking frameworks for change namely the infrastructure, attitude, staff development support and also sustainability and transferability.

The elements of multimedia in education

It is very tempting to use the latest computer wizardry to computer enhanced learning materials. However the instructional design of these systems should be based on a careful examination and analysis of the many factors both human and technical relating to visual learning students must be able to select appropriate multimedia tools and apply them to the learning task within the learning environment in order for effective learning to take place

A multimedia learning environment involves a number of components or elements in order to enable learning to take place hardware and software are only part of the requirement. As mentioned earlier. Multimedia learning integrates five types of media to provide flexibility in expressing the creativity of a student and in exchanging ideas.

Text

Out of all the elements, text has the most impact on the quality of the multimedia interaction. Generally, text provides the important information text acts as the keystone tying all of the other media elements together. It is well written text that makes a multimedia communication wonderful

Sound

Sound is used to provide emphasis or highlight a transition from one page to another. Sound synchronized to screen display, enables teachers to present lots of information at once. Sound used creatively becomes a stimulus to the imagination used inappropriately it becomes a hindrance or an annoyance a great advantage is that the sound file can be stopped and started very easily.

Video

The representation of information by using the visualization capabilities of video can be immediate and powerful. While this is not in doubt it is the ability to choose how we view and interest, with the content of digital video that provides new and exciting possibilities for the use of digital video in education video can stimulate interest if it is relevant to the rest of the information on the page and is not over done. Video can be used to give examples of phenomena or issues referred to in the text. On the other hand it is unlikely that video can completely replace the face-to-face lecture rather video needs to be used to supplement textual information.

Animation

Animation is used to show changes in state over time or to present information slowly to students. So they have time to assimilate it in smaller chunks. Animations when combined with user input enable students to view different versions of change over time depending on different variables.

Animations are primarily used to demonstrate an idea or illustrate a concept. Video is usually taken from life whereas animations are based on drawings.

Graphics

Graphics provide the most creative possibilities for a learning session. They can be photographs, drawings, graphs from a spreadsheet, pictures from CD-ROM or something pulled from the internet. Standing commented that the capacity of recognition memory for pictures is almost limitless. The reason for this is that images make use of a massive range of cortical skills, colour, form, line dimension, texture visual rhythm and especially imagination.

Educational Requirement

Employing multimedia tools into the learning environment is a rewarding but complex and challenging task. All of the multimedia formats available text sound video animation and graphics already exist in one form or another in most libraries students can explore an almost infinite variety of information. All these explorations can certainly lead to new discoveries, but unless consumption is followed by production the story ends. Without a chance to use their new discoveries and demonstrate what have learned the knowledge gained soon becomes the knowledge forgotten.

Need of multimedia

It is often claimed that multimedia technology offers a more stimulating and motivating learning environment then that associated with traditional teaching methods. The motivation to learn is an important aspect of effective teaching. This expectancy theory of motivation states that a person's motivation is based upon on interaction between the persons expectation of being able to successfully complete a task and the value of that task to the person. We must therefore specify how multimedia can be used to motivate students to learn when using multimedia, students expectations must be carefully managed and this has important implications for the teaching strategy needed. Therefore it is important that students possess adequate computer skills so that they are sufficiently confident and competent in the use of the technology.

The use of multimedia with student centred learning

Student centred learning recognizes that students learn well when they take responsibility for their own learning and also that different students have different learning styles and different learning needs. The student centred approach to learning is premised on the learning process being directed towards meeting student needs. This is not achieved by courseware which has no responsibility to students other than the opportunity to study in their time.

A student centred learning approach does not mean any involvement from the lecturer. The role of the lecturer in the learning process is altered. However so that rather than being the transferor of knowledge

the lecturer becomes the facilitator of students learning. The lecturers role should be to help students develop their learning and study skills so that they have the confidence and ability to take more control over their own learning.

Advantages of Multimedia

The pedagogical strength of multimedia is that it uses the natural information-processing abilities that we already prossess as humans our eyes and ears in conjunction with our brain form a formidable system for transforming meaningless sense data into information. The old saying that a picture is worth a thousand words often understates the case especially with regard to Moring images as our eyes are highly adapted by evolution to detecting and interpreting movement.

For the student one advantage of multimedia courseware over the text-based variety is that the application looks better. If the causerie includes only a few images at least it gives relief from screens of text and stimulates the eye even if the images have little pedagogical value in this respect using the text only even in a creative way has obvious limitations as compared to the use of both text and pictures

Disadvantage of multimedia

Multimedia requires high and computer systems. Sound images, animation and especially video, constitute large amounts of data which slow down or may not even fit in a low-end computer unlike simple text files created in word processing multimedia packages require good quality computers a major disadvantage of writing multimedia courseware in that it may not be accessible to a large section of its intended users if they do not have access to multi-media capable machines.

Benefits to teachers

Allows for creative work

Saves time for more challenging topics

Replaces ineffective learning activities

Increases students contact time for discussion

Conclusion

In considering the role of multimedia in the education process it is clear that this role is potentially significant, but it has been agreed in this that there is a need to separate the myths surrounding this technology from the realities. In order to gain maximum benefit from the use of this technology, it is important that the key differential advantages are used as the base from which to develop appropriate courseware. It is equally important that the limitations of the technology are recognized and that courseware development is not based upon unrealistic expectations of its applicability.

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