Abstract - E-learning methods have evolved since computers were first used as a teaching aid. There is a trend to move towards blended learning services, where computer-based activities are integrated with practical or classroom-based situations. Today many technologies can be, and are, used in e-learning, from blogs to collaborative software, ePortfolios, and virtual classrooms. This paper explores a subset of Web-Based learning, Single Concept Learning Modules.

Keywords - Single Concept, Modules, e-learning, web-based learning

INTRODUCTION

Single Concept Learning Modules are a part of Web Based Learning and E-Learning concepts. E-Learning is basically any method of teaching and learning that involves the use of computers. The course work is transmitted to the learners via computers and network over the internet or using teaching aid softwares. They can be self-paced or instructor led and can contain various forms of media to help simply the topic for the learners to comprehend.

Single concept Learning modules comprise of a set of web links based on a single topic put together in a linear and structured manner to help the learners. The availability of these modules over the internet and the ease of their distribution have made it very easy for the students to access a ‘teacher’ at any time they want.

SCLMs can be created for the most frequently occurring problematic areas in a course. Certain topics are difficult for everybody and breaking them down with examples and active prompts helps the students learn better. SCLM also provide long-term and cost-effective solutions for such problems.

ADVANTAGES AND DISADVANTAGES

I. Advantages

The major advantage of these web based learning modules is the accessibility. It allows anyone to study anything from anywhere. During regular classes students may slack off or daydream, and having these web modules enables them to catch up on the tougher topics anytime. Students have access to relatively obscure subjects. There is, in fact, a huge library of courses and training offered around the globe. Web-based learning has made it possible to study nearly any subject from nearly anywhere in the world.

The concepts are presented in modules which allow the students to progress at their own pace. The ability to work through the material at the student’s own pace is a dramatic advantage over traditional teaching methods.

The web modules are also metacognitive, i.e. they are designed in such a way that it requires active participation from the learner and offer various prompts to which the student has to respond. The learning continues from there on. They also offer certain quizzes to test the student’s comprehension. The feedback given is accurate and impartial.

The Modules also offers a structure to the topic and arranges all the information in a linear order and breaks down the topics for easier understanding of the students. It also uses a lot of other media such as pictures, graphics and animation.
Reusability is also a major advantage. The same web module can be used again and again until the course work has to be changed. The cost of development is one time and then it can be distributed as much as the license and copyright allows.

II. Disadvantages

Like all the other electronic medium of learning and transfer of knowledge, the obvious disadvantages include the hardware problems that occur due to the equipment.

SCLM require prior knowledge of how computer work and basic navigational capabilities from the user. The availability maybe compromised if the files are lost in a hardware crash or a server problem, if they are available over the internet. Certain virus attacks also cause the malfunction of these files.

The development cost of these modules are also included depending upon how and using what software they should be developed. Some schools may not have enough funding to provide for the hardware and the equipment that is necessary for these modules.

It is also a belief of the traditional teachers that these methods are very cold and impersonal and the lack of a teacher will be felt as a classroom environment cannot be regenerated using these web modules.

The content and the arrangement of the module itself may become a disadvantage, when more care is taken to make the module look good instead of actually adding relevant course work.

The web modules that do not contain any prompts or user interaction may also be a big disadvantage, as the user cannot review his understanding of the topic and will not get feedback.

The major disadvantage has been termed the butterfly defect. Certain people who do not possess the capability to retain textual information seem to recall only the pictures and the features of the SCLM but not the actual content of it. This must be kept in mind while designing the web module.

CONTENT

As the name suggests, Singe concept learning modules concentrate on a single topic from the course. The modules can be created by peers, teachers or the previous students of the course. Researches have shown that some students learn better from peers than from teachers as the need of a student is clearly understood by another student.

The content of the module should be linear and structured. It should fulfill the needs of the student by breaking down the topic into smaller more comprehensible textual material with some audio and pictorial help.

Navigational features must be included in the module to provide the student to move back and forward to access information how many ever times it is needed.

For proper feedback from the system, one ma include quizzes or prompts which require student participation which in turn tests the student’s understanding of the topic at hand.

The length of the module must be ling enough to cover the topic and must be precise enough to prevent deviating from the objective at hand, and that is to improve the student’s understanding.

CONCLUSION

Web-based learning and SCLM cannot replace, and will probably never replace, traditional learning. However, it is in some ways far superior, so students who meet certain criteria will find it invaluable. In order to maximize its effectiveness, educators must develop new teaching techniques designed to overcome the limits of e-learning.

REFERENCES

