E-LEARNING CONTENT DEVELOPMENT A ROLE IN VIRTUAL CLASS ROOM

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ABSTRACT

For the past two decades, the e-learning is becoming more popular and vibrant among the learners world-wide. Developing e-learning is more costly than preparing teaching contents and pilot training (faculty training), especially if multimedia or highly interactive methods are used for delivering the course content. However, delivery costs for e-learning (including costs of establishment of the e-learning hardware and software requirements) are considerably lower than those for creating classroom facilities, instructor time, travel time of the students lost towards attending the class room sessions.

Creating e-learning material is a time consuming process. It requires expertise and expertise and experience in handling tools. There are various ways of creating e-learning content such as using html pages, videos, images and audio. In this paper, the various ways of creating e-learning is presented and discusses the design components of e-learning.

Keyword: - *HTML, Audio, Video, Open Source, Virtual Class room.*

INTRODUCTION

Study materials and course contents provided to the students have been designed effectively will create an ambience to achieve the expected outcomes from the students. Effective design of electronic learning materials relies on instructional design processes that reflect the absence of or reduction in face-to-face instruction [Brown 2005]. Moreover, e-learning reaches a wider target audience by engaging learners who have difficulty in attending traditional classroom training because they are geographically dispersed with limited time and/or resources to travel, busy with work ,or family commitments which do not allow them to attend courses on specific dates with a fixed schedule located in conflict and post-conflict areas and restricted in their mobility because of security reasons limited from participating in classroom sessions because of cultural or religious beliefs facing difficulties with real-time communication (e.g. foreign language learners or very shy learners). E-learning can offer effective instructional methods, such as practicing with associated feedback, combining collaboration activities with self-paced study, personalizing learning paths based on learners' needs and using simulation and games. Further, all learners receive the same quality of instruction because there is no dependence on a specific instructor. In general, learning material will give the learner a little more comfortable room than a general class taught at a single pace. Everyone learns differently, and some people will want to review more material than others. E-Learning process will allow learners the opportunity to explore the material at a rate they're comfortable with. Using visuals, comprehension quizzes, and learning games to reinforce material will lighten the mood and make for a stress-free learning experience.

A virtual classroom is an online learning environment. The environment can be web-based and accessed through a portal or software-based and require a downloadable executable file.

Just like in a real-world classroom, a student in a virtual classroom participates in synchronous instruction, which means that the teacher and students are logged into the virtual learning environment at the same time.

RESULTS OF FINDING

Different systems of communication seem to be at the heart of many of the cultural and ethnic differences that affect the learning environment. From the above statement, it is clear that Technology is required to produce and deliver e-learning. Different tools can be used to produce e-learning content, depending on which file formats will be used and the nature of the desired final product. Microsoft PowerPoint or even Word can be sufficient to create simple learning resources like a presentation or a tutorial. However, more sophisticated tools are required if you want to create interactive content. Courseware authoring tools are special- purpose tools that create interactive e-learning content. They add text, graphics and other media, but also provide a framework to organize pages and lessons for reliable navigation. While most of these tools are stand-alone packages that incorporate assessment and quiz capabilities, some integrate those functions from other programs. To create media components, authoring tools need auxiliary software (e.g. Adobe Photoshop for bitmap graphics, Adobe Illustrator for vector images or Adobe Flash for animations) and other tools for video and sound creation and compression. Organizations and education institutions increasingly are turning to learning platforms to deliver courses to learners and manage their online activities. A learning platform is a set of interactive online services that provide learners with access to information, tools and resources to support educational delivery and management. They provide access and services to a wide user base through the Internet. Learning platforms are usually referred to as a learning management system (LMS) or a learning content management system (LCMS), terms which often are used interchangeably. There are a variety of learning platforms with different levels of complexity, and despite their differences, they also have many features in common. Their most important features include learning content management: creation, storage, access to resources; curriculum mapping and planning: lesson planning, personalized learning paths, assessment; learner engagement and management: learner information, progress tracking; and tools and services: forums, messaging system, blogs, group discussions.

HTML PAGES

The most common way of preparing e-learning resources is in the form of web pages within a web site. This is usually a series of web pages (HTML files) that are linked together using a navigation system. The pages themselves contain information in the form of text, images and some types of audio, video, animation. It is easier to place interactive elements in the pages to add a level of participant activity and engagement. Once pages are created they can be uploaded to a web server or LMS so that students can access them. Perhaps the fastest way of creating an e-learning resource is to provide links to existing web sites and resources into the instructor web site. The pages prepared by the instructor can create the context and the instructions for the students and provide hyperlinks to the resources that already exist on the internet. It is important to realize that these links may become obsolete as web sites often change their addresses or are removed from the web.

VIDEO

With the availability of high-quality digital cameras, cheap recording and storage media and consumer-level software capable of quality editing on the desktop, video has become an affordable option for enhancing e-learning material. Enthusiastic individual trainers can achieve good results, or development teams can prepare quality content on a budget. Adding video to the-learning materials can really make them engaging and provide an alternative to the “sit and read this…” model that is used so often.

Video meets the preferences of those students with a predominantly auditory and visual learning style. A quick minute or two minute video segment can get across as much information as several screens of text. In case of using video make sure it is worth it. Just having a ‘talking head’ may not be the most appropriate use of the technology.

Demonstrations and active scenes make best use of the medium. One of the main problems of including video, or movie media as e-learning resources is the size of the files and the time they take to download. There are, however, a few ways to overcome the download problem, the most popular of which is hosting.

RESULTS OF FINDING

The simplest method of creating an image of the screen is to use the Windows Print Screen function and then paste the image into a word processing document. Screen capture software allows the instructor to take a "snap shot" of the screen and saves it as an image file which the instructor can then use in their web based learning resources. The instructor can specify if this is to be a .jpg or .gif file type. Usually a jpg file type is better as it produces a more "photographic" quality image but it may be larger than a .gif file. Screen capture software also allows the instructor to select the part of the screen to be captured. The instructor may capture the whole screen, a specific window or an area that they need. Once the image(s) have been captured they can be added to the web learning resources using the privileges available in LMS.

MAKING SCREEN MOVIES

A screen movie captures the motion of the cursor as it moves around the screen, menus selected and buttons clicked. Some software also allows the instructor to create a voice annotation along with the screen movie. The movie file can be saved in a number of formats that can be embedded in a web page and viewed in most modern browsers

IMAGES

Creating a tutorial on how to use a computer or work with specific software may require capturing either images from the screen or making a "movie" of the actions that are performed by the instructor.

AUDIO

By adding audio to the e-learning resources can add an extra dimension of information and engagement for the students. It is much easier to listen to a piece of information, particularly if it is complex, than to read it on the screen. It also adds a personal and human element to the learning resource. It is mandatory to consider the size of the recording file when making an audio record. Long high quality audio files can be quite large. Making a number of recordings of several minutes is a better strategy than creating one long recording. The file type can also affect the file size. MP3 files are quite small and are played by most browser plug-ins. To reduce files size, choose a recording quality of 11,000 Hz. This is equivalent to a good phone conversation.CD quality is 44,000 Hz and will create very large file sizes. Make sure the recordings are made as mono rather than stereo recordings. This will also reduce the file size and will not be able to hear the recording in stereo when played from a web page. Make sure have a good quality microphone. It does not have to be a broadcast quality microphone but using the inbuilt microphone in a laptop computer will probably give a good quality recording. . Once the audio have been recorded they can be added to the web learning resources using the provisions available in LMS. The tools of technology used to create such e-content can be used anywhere any time with travelling in bus, plain, train etc. Once we have created the content it can be used by global student. He can download in his external storage like Hard Disk, Pen Drive, CD/DVD etc., then student assed by e-content offline.

Using internet and video conferencing we can bring to gather global teacher on one platform to discuss of debut particular topic for the benefit of global student.

BENEFITS OF VR IN THE CLASSROOM

Schools that have adopted virtual reality in the classroom are starting to see the benefits of this new technology. For example, students are much more engaged and actively participating in classroom activities when VR is used to teach the curriculum. The hands-on approach is giving students a real-time experience that helps them digest and retain information at a much higher rate.

Virtual reality lesson plans are also instrumental in helping students with different learning styles grasp what's being taught to them. The VR curriculum allows students to understand complex subjects in a way that's appealing and stimulating.

Another benefit to VR in the classroom is that some VR platforms allow teachers to actually track student engagement and performance. These real-time tracking capabilities are extremely helpful in guiding, observing, and controlling classroom activity and behavior.

CONCLUSION

With the growth in technology and cloud computing will continue and more and more resources will be hosted centrally in the cloud which will offer cheaper and easier access to advanced learning systems, applications and resources. Video and audio is becoming a technology that is no longer restricted to specialists and it is being used my more and more people for developing teaching resources. The internet has transformed the way we learn. While formal training still has its place, the focus is more and more on accessing information "just in time".

As Open Source Software competes with proprietary software, and as software become easier to use, the costs of developing e-learning are decreasing. The development of e-learning materials becoming easier and quicker for educators and trainers with little knowledge or experience in computing to develop effective e-learning courses. As the software for development of e-learning becomes easier to use, yet more sophisticated, it will become possible to develop e-learning courses that can more readily be tailored to the learner's particular needs.

"The benefit of virtual E-content is that the global student can benefit with knowledge of the best world class, industry standard and professional teacher. Even the remotest, geo-graphically dispersed students can get benefit of modern trends in his/her subject of interest from various teachers on net"

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