International Journal Of Advanced Research In Engineering Technology & Sciences
ISSN: 2394-2819
Email: editor@ijarets.org March- 2015 Volume 2, Issue-3 www.ijarets.org

Developing an eLearning web -Based Platform

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ABSTRACT
The Web Based Training (WBT) or eLearning is emerging to replace traditional training."eLearning", is rapidly becoming the preferred route to building and maintaining advanced performance capabilities via improved efficiencies and effectiveness. It transcends the normal classroom mentality in favor of a Web-based method of delivery that meets specific needs and is self-paced, extremely interactive, and measurable. eLearning offers a new way to think about workforce development. Intranets and the Internet are a natural vehicle for supporting and delivering eLearning.
Advances in technology and the growth of e-learning to provide educators and trainers with unique opportunities to enhance learning and teaching in corporate, government, healthcare, and higher education. This application serves as a forum to facilitate the exchange of information on the current research, development, and practice of e-learning in the sectors. The purpose of this paper is to research the problems with current eLearning platforms and recommend ways to improve the effectiveness and efficiency of eLearning platforms.

1. INTRODUCTION

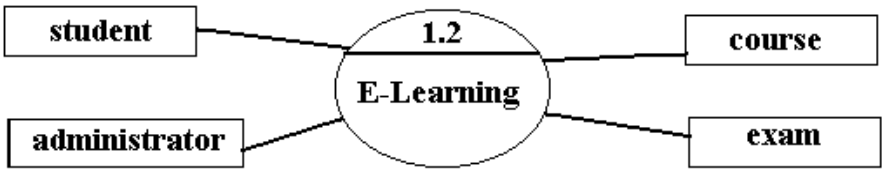
With the increasing use of networked computers, the Internet, and advances in telecommunication technologies, eLearning has been widely recognized as a valuable tool for learning and training. eLearning, sometimes also called online learning, or web-based learning, is a type of distance learning in which training or educational material is delivered electronically to remote learners via the Internet or Intranet. In academia, educational opportunities have been carried to many remote corners of the earth via the Internet. eLearning has emerged as one of the fastest-moving trends in higher education, enabling professionals to learn from afar and keep pace with technological and managerial change. Thousands of online courses, including degree and certificate programs, are now being offered worldwide by universities. Not only can instructional materials such as syllabi, lecture notes, and assignments be made available on the Internet, but online collaboration and discussion can also occur. Knowledge stored on the Web can be given well-timed updating for the benefit of e-Learners. Have several advantages.

First, eLearning provides time and location flexibility. Second, in the long run, eLearning results in cost and time savings for educational institutions. Third, it fosters self-directed and self-paced learning by conducting learner-centred activities. Fourth, eLearning offers a collaborative learning environment by linking each learner with physically dispersed experts and peers. Fifth, it allows unlimited access to electronic learning materials. In addition, knowledge stored in a Web repository can be updated and maintained in a timely and efficient fashion.

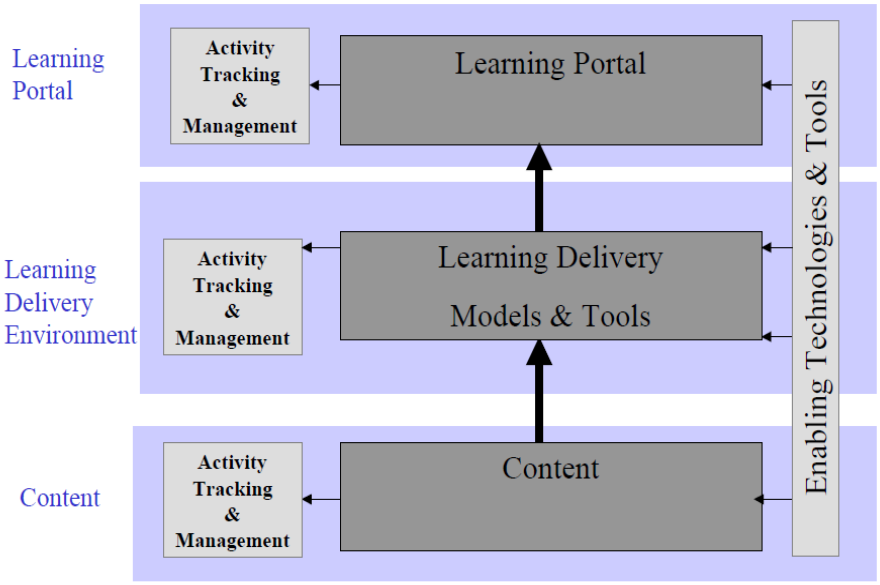
2 THE E-LEARNING PLATFORM

Our e-learning platform consists of a Webpage, with navel point an enhanced Webcast and at the same time it will have other capabilities, like.net applications, connections on the Web in selected applications and services. Looking at the interface we can easily see the format that our e-learning platform have. The system will be user friendly; it doesn't require any special computer skills from the user. Technically, we need to engineer a method of integrating multimedia content. While technology itself does not determine learning outcomes, technologies differ significantly with respect to the learning environments they foster. Theoretically, we need to understand how to control different factors in order to improve eLearning

effectiveness. Multimedia technologies combine several communication media such as text, graphics, video, animation and sound. Simply defined, the term multimedia refers to a computer-based presentation that delivers information. e-learning focuses on educational courses. Educational course materials or courseware are usually modified and added with various different media and are uploaded to a networked environment for online accessing. It offers online instruction that can be delivered anytime and anywhere through a wide range of electronic learning solutions such as Web-based courseware, online discussion groups, live virtual classes, video and audio streaming, Web chat, online simulations, and virtual mentoring. Additional tools, such as discussion forums and online quizzes, are integrated to support collaboration and evaluation.



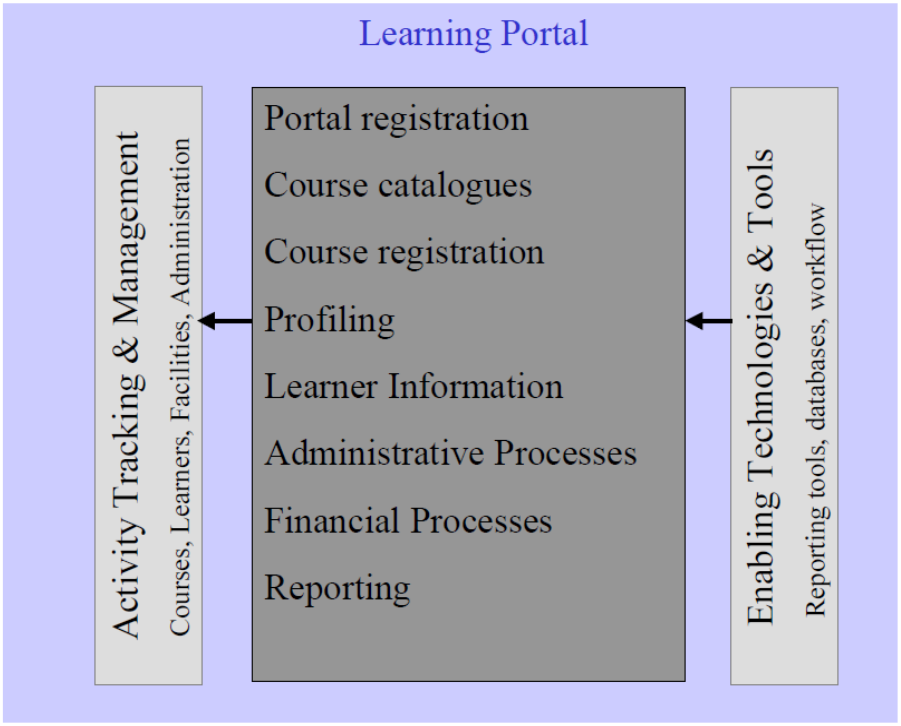
Administration tools include file management authentication, and authorization.
Student tool functions include:
a) Browsing class material: readings, assignments, projects, other resources
b) Collaboration and sharing: and asynchronous synchronous bulletin boards and discussion forums. c) Learning progress scheduling and tracking: assignment reminders and submission, personal calendars, and activity logs.



e-Learning Technology Framework

2.1 Learning Portals

The term "portal" is a relatively recent addition to Internet terminology. Although definitions vary slightly between organisations, in essence a portal is an access-point to a set of services via a web-browser. A Learning Portal is really a concept rather than a specific product. It is an aggregation of learning services and associated products into a single coherent access point. Typically this will include course catalogues, course registration, need assessment, instructional support, and learner forums and so on.



2.2 Portal Functionality

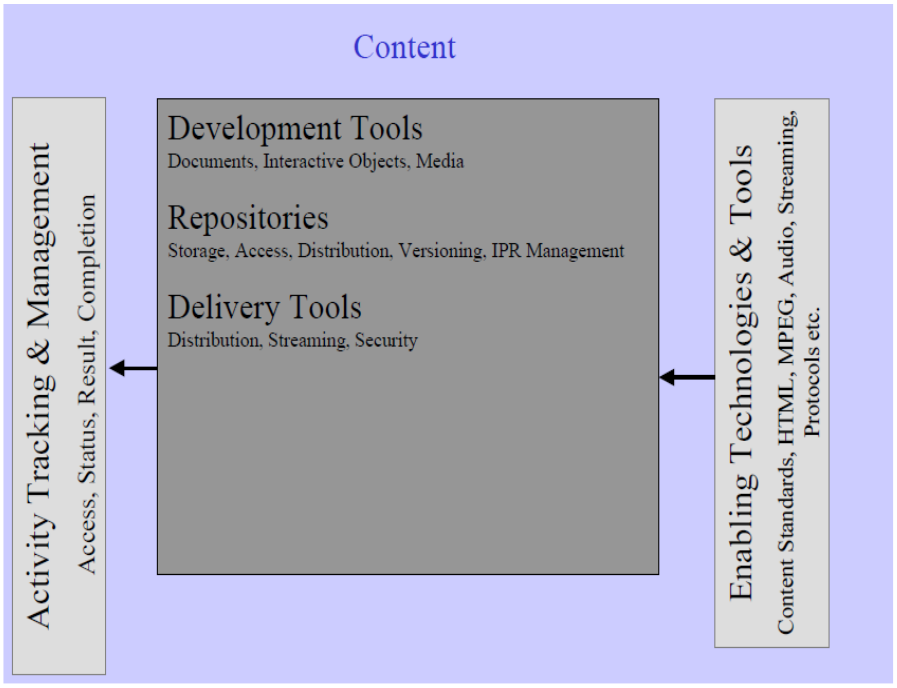
Portals are really a set of products to support the learning services provided. The products can range from a Learning Management System (LMS) to manage access to a course catalogue, through to collaborative tools to support discussion forums, and content tools to create and manage specific content. Access for online courses can be directly managed via the LMS component of the portal.

The following is a list of functionality that a Learning Portal could provide:

- Catalogue of courses and learning available
- Registration and enrolment services
- Personal activity tracking
- Organisational tracking
- Personal profiling
- Personal information storage areas
- Learning forums
- Instructional support
- On-line course/learning fulfilment

2.3 Personal Information and Activity Tracking

Information relating to the learner will also be stored within any controlling Learning Management System, learner details are required within the learning process. Any environment allowing collaboration or instructional interaction needs some basic information about the learner to be available to the other parties. This is commonly achieved through the use of a personal profile form. The contents of this form will vary from environment to environment but should include basic public domain information on the student, such as an e-mail address, and may include additional information including a photograph or pointers to other information sources. As well as basic information on the learner, the LDE will need to keep more private information regarding the learner's progress and results through the learning process. This could include information on what has been completed, test results, assignment grades etc.



e-Learning Technology Framework - Content

2.4 Content

Content includes web media, interactive media, video, audio and so on. Interactive content includes content originally delivered as CBT courses, as well as specially delivered interactive learning objects, created using Flash or HTML. Video and Audio can be attached, downloaded and played or streamed.

Document-based content probably represents the bulk of historical content and may still have an important role to play in an e-Learning solution. Many of the learning models need a variety of supporting content, and document-based content is often the most available and descriptive material.

2.5 Enabling Technologies and Infrastructures

We have focused on the learning tools and applications. However, these tools require an underlying Infrastructure and other enabling technologies to function. This includes:

- Internet and Intra-networking and associated protocols (e.g. TCP/IP)
- Databases (relational and document-stores such as Microsoft sql server or Microsoft Exchange)
- Application Tools and Development Languages (Java, JavaScript, .Net framework, Microsoft Development Tools)
- Other HR/ERP applications

3. CONCLUSION

The platform or learning Management System (LMS) is the core of any eLearning course ware. In order to enable the involvement of students in a more active learning style, more interaction between the LMS and the student is needed. The dialog can include both natural language and GUI actions and should have a natural language processing component built into the LMS system, which is used to interpret students' responses and generate follow-up dialogs. The use of animation and multimedia in various course wares could greatly enhance the learning capability of a student.

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