Virtual Learning

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ABSTRACT

Virtual learning environment (VLE) is a system designed to support teaching and learning in an educational setting. It contains a set of teaching-learning tools to enhance student's learning experience by computers and internet in the learning process. A virtual learning environment (VLE) is a software system designed to support teaching and learning. VLEs are generally operated on the World Wide Web, and therefore they can be accessed both on and off campus, provided that the users are registered and can access the internet. This overcome the limitation of traditional face to face teaching, and ensures that learning is neither confined to geographical location and time. VLEs are becoming more popular and embedded in many higher education institutions around the world. It is not only because of their flexibility, but also because they provide a wide varieties of tools on facilities including content delivery, assessment, evaluation, communications and so on (Chin, 2004). Most VLE system is intended not simply to produce the classroom environment online, but to use the technology to provide learners with new tools to facilitate their learning. They aim to accommodate a wider range of learning styles and goals, to encourage collaborative and resource based learning, and allow greater sharing and re use of resources in the MLE/VLE particular attention is given to issues of interoperability, both between VLEs and various providers of learning content (UNESCO, IITE, 2003).

Introduction :

Virtual learning environment (VLE) is a system designed to support teaching and learning in an educational setting. It contains a set of teaching-learning tools to enhance student's learning experience by computers and internet in the learning process. Here, the teacher has more user rights than students, i.e. to create or modify curriculum content and track students' performance. New features in this system include wikis, blogs, RSS and 3D virtual spaces along with other tools. VLEs are often used in schools and other educational institutions in order to make learning experience more interactive. It was originally created for distance learning. But, it is often used to supplement traditional face-to-face activities commonly known as blended learning. These systems usually run on serves, to serve the course to students through multimedia or web pages.

The Concept:

Generally the concept of virtual learning is understood as e-learning, computer assisted learning, on-line learning etc. It is a flexible mode of learning which can be achieved according to own pace and time. It provides learning resources to the learner in digital format. It is live, two way interactive mode supported by multimedia lessons providing links to the Global sources of knowledge. It enhances learning freely without any restriction. It involves collaboration, communication and content tools. Usually teachers can upload teaching–learning materials, assignment questions for students, which the students submit through on-line. Then, teacher can return it after evaluation. The learners can discuss about their learning through chat and e-mail, which are the features of virtual learning. Some Virtual learning packages are commercial software's which are uploaded on to servers and some are open sources and web based. Any person with personal computer and modem can access it in any place and any time. Virtual learning environment integrates multiple tools, heterogeneous technologies and multiple pedagogical approaches. It can overlap with physical learning environment.

Britain and Liber(1999) in their evaluation of VLEs for the higher sector state that the definition of

VLEs describes system which are known as on-line learning environments, learning management system and collaborative learning software. VLE is a term that contains the on-line learning services. This is also called learning platform that organises and provides access to on-line learning services for the students, teachers and administrators. These services include access control, provision of learning content, e-learning tools and administrators of user group.

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Components:

The Components of VLE include the following (BECTA, 2003):

- Notice board/bulletin board
- Course outline (course structure, assignments, assessment dates,)
- E-mail facility
- Conference tools (asynchronous conferencing or discussion groups)
- Student home pages
- Metadata (Ability to add metadata to resources)
- Assignments (Ability for tutor to create assignments)
- Assessment
- Synchronous collaboration tools (such as white board, chart and video conferencing)
- Multimedia resources (assessing, storing and creation)
- File upload area (Ability to students upload their resources to a shared area
- Calendar

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The types of learning that VLE system facilitates are (Weller, 2007):

Community of practice/socio cultural learning
Resource based learning
Peer learning
Content- led/instructive learning
Collaborative learning
Instructor-led learning

There are number of VLEs available in market. Some are open sources and some are commercial and charge a significant licence fee to use. Some popular platforms are Microsoft Learning's Gateway, Blackboard, Learn wise, Ergo, study wiz, Net media, COCE, Web CT, Serco etc. Each of them possesses its own characteristics and is used in different higher education institution. Selection of VLE depends on needs and ability of the institution.
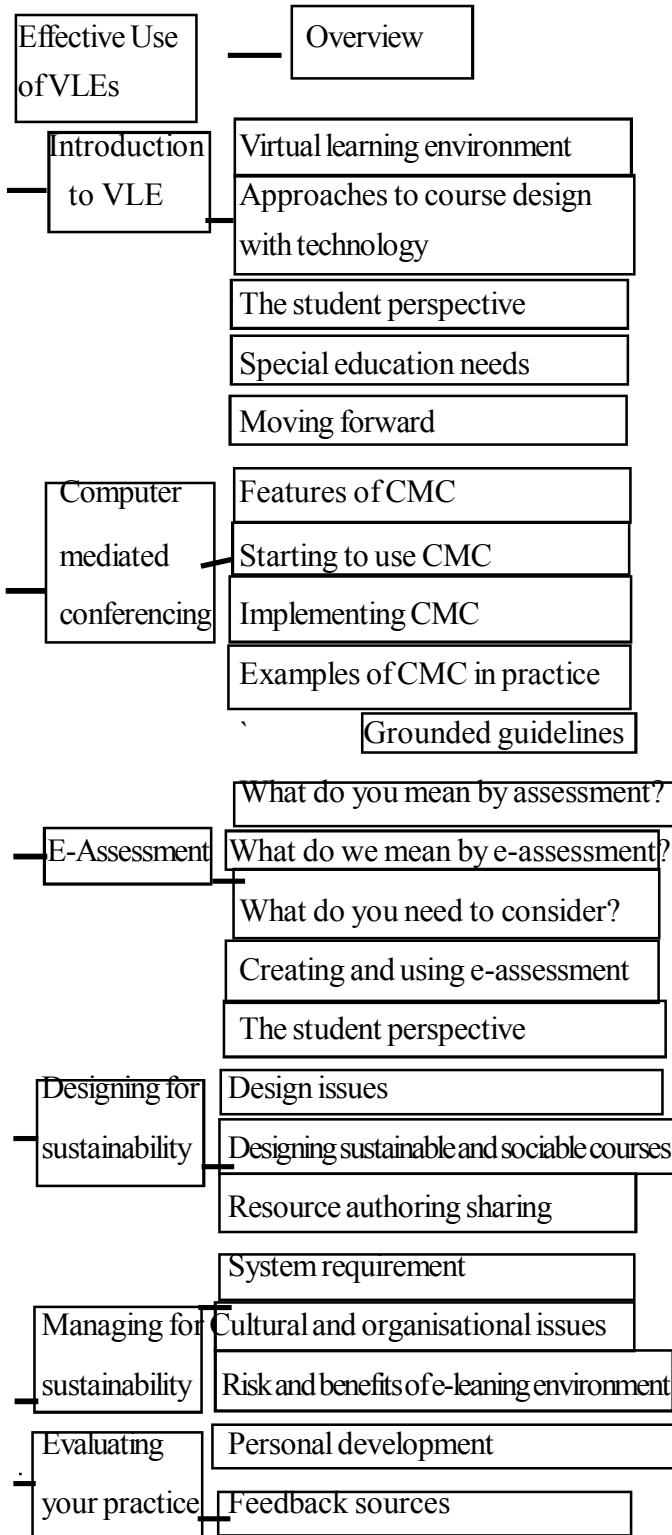
Mason (1998) has developed a framework of thee models to identify the different ways of using VLEs.

1. **Content and Support Model:** Where pre-prepared content is delivered in print or on-line, and support is provided online. Content and support are not integral to one another, i.e. online support is an optional extra and is not integrated into learning activities. It is relatively easy to establish but does not fully exploit the benefits of online learning.

2. **Wrap-around Model:** Where there is a mixture of pre-prepared content and online learning activities. The learning activities involve online discussion and collaborative activities.

3. **Integrated Model:** Where most of the learning takes place via collaborative online activities and content is largely determined by the learners, either individually or as group. Learning is very much student centred and highly collaborative.

There are also other models like Laurillard's Conversational Learning, Beer's Viable System Model and Gilly Salmon's e-moderating Five Step Model etc. which are useful for evaluating virtual learning and online activities.

Effective Uses of VLEs:

Mishra(2012) has given a model of 'infokit map' on effective use of VLEs.

Effective Use of VLEs	—	Overview

Introduction to VLE
- Virtual learning environment
- Approaches to course design with technology
- The student perspective
- Special education needs
- Moving forward

Computer mediated conferencing
- Features of CMC
- Starting to use CMC
- Implementing CMC
- Examples of CMC in practice
- Grounded guidelines

E-Assessment
- What do you mean by assessment?
- What do we mean by e-assessment?
- What do you need to consider?
- Creating and using e-assessment
- The student perspective

Designing for sustainability
- Design issues
- Designing sustainable and sociable courses
- Resource authoring sharing

Managing for sustainability
- System requirement
- Cultural and organisational issues
- Risk and benefits of e-leaning environment

Evaluating your practice
- Personal development
- Feedback sources

Facilities :

Mishra (2012), suggested a VLE should implement all the following implements:

- The syllabus for the course
- Administrative information including the location of sessions, details of pre-requisites, credit information, and how to get help.
- A notice board for up-to-date course information
- Students' registration and tracking facilities, if necessary with payment options;
- Basic teaching materials these may be the complete content of the course, if VLEs is used in distance mode, or copies of visual aids used in lectures or other classes where it is being used to support a campus-based course
- Additional resources, including reading materials, and links to outside resources in libraries and on the internet;
- Self-assessment quizes which can be scored automatically;
- Formal assessment procedures;
- Electronic communication supports including e-mail, threaded discussions, and a chat room, with or without moderator.
- Differential access rights for instructors and students.
- Production of documentation and statistics on the course in the format required for institutional administration and quality control.
- All these facilities should be capable for being hyperlinked together.
- Easy authoring tools for creating necessary documents including the insertion of hyperlinks-though it is acceptable (arguable, preferable) for the VLE to be designed allowing standard word processors or other office software to be used for authoring.
- In addition, the VLE should be capable of supporting numerous courses, so that student and instructors in a given institution (and, indeed, across institutions) experience a consistent interface when moving from one course to another.

Conclusion:

VLE is a new paradigm of effective teaching-learning. It has ability to create positive relationship between learners and resources. It facilitates both formal and informal teaching-learning. It can provide quality instruction to the learners to their doorsteps according go their needs and convenience. I t can solve many problems in a few time and also helpful to fulfil the agenda of our constitution "Education for all". It should be designed carefully by the help of experts. Having several merits, there are certain demerits of virtual learning. It is a scientific advanced technique developed by human being, it cannot inspire or influence like human teacher.

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