

---

## An Innovation in Education: Virtual Learning Environment

Dr. C. THENMOZHI

Principal

Adhiparasakthi College of Education,  
G.B.Nagar, Kalavai, Vellore District, Tamilnadu, India.

*Teachers play a vital role in our society. They add to the cultural and the economic aspects of the knowledge society. No one method of instruction can prepare teachers to work effectively for the knowledge society. Instead, approaches must be comprehensive, integrated and varied. Virtual learning environment is an innovative in higher education for world class standards. A virtual learning environment refers to the technology which supports teaching and learning. VL takes learning outside the four walls of the classroom aiming at universal learning. It is live, two-way, interactive mode supported by multimedia lessons providing links to the knowledge repositories across the globe. It removes all barriers in knowledge transfer and dissemination. VL enables a society to move. The components of a VLE include e-mail facility, assessments, student home pages, calendar, file upload area, multimedia resources, conferencing tools and course outline. Perspectives of VLE are administrators, technicians, Course developers /Teachers, Learners.*

Keywords: Innovation, Education, Learning, Environment.

### Introduction

Good learning helps a person to grow as a human being. The process is natural and positive. Instructing should be defined as the process of helping learning to occur. The information age and a networked world are forcing educators to rethink the educational experience. It has become very clear that the value-add in a 'knowledge-based future' will be a learning environment that develops and encourages the ability to think and learn both independently and collaboratively. The demands of an evolving knowledge society create expectations for individuals to be independent thinkers, and at the same time, interdependent, collaborative learners.

### E-learning

E-learning Strategy Task Force (2002) U.K. has defined 'e-learning' as follows:

E-learning is a relatively new tool with the potential to radically improve participation and achievement rates in education. Benefits include: the ability to customize learning to the needs of an individual and the flexibility to allow the individual to learn at their own pace, in their own time and from a physical location that suits them best'.

---

## Virtual Learning (VL)

The concept of Virtual Learning (VL), described by various ways such as e-learning, computer assisted learning, technology enhanced learning or online learning is flexible mode of learning with learner at the centre. It provides resources to the learner in digital format, 24\*7, enabling him or her to study at his /her convenience. Virtual learning (VL) takes place owing to developments in ICT.VL takes learning outside the four walls of the classroom aiming at universal learning. It is live, two-way, interactive mode supported by multimedia lessons providing links to the knowledge repositories across the globe. It removes all barriers in knowledge transfer and dissemination. VL enables a society to move towards knowledge society by making knowledge freely available to all.

## Virtual Learning Environment (VLE)

A virtual learning environment is a term that refers to technology which supports teaching and learning. A virtual; it involves collaboration, communication and content tools, as well as providing students with an online personal learning space. VLEs do not decrease the importance of the classroom or the teacher - they enhance the learning and teaching experience. Their features vary depending on the specific VLE, but usually teacher/ lectures can upload lecture notes, create quizzes for students, to complete online, and set student's assignments, which the students can then submit online via the VLE and the teacher can usually mark and return work online too. Often there is an attached email feature and a chat feature where students can discuss work. Usually students can keep track of their grades, on the VLE, and the teacher can keep track of their student's grades. Some VLEs, are commercial software packages which are uploaded onto servers, and others are open source (free) and web based. Anyone with a computer, web browser and network connection can access the VLE both in and out of college/university. It enables teaching and learning to take place take place at any time – a college /university with no physical boundaries.

## Dillenbourg Vle

According to Dillenbourg et al. (2002) a virtual learning environment:

- It is a designed information space.
- It overlaps with the physical learning environment.
- It integrates multiple tools, heterogeneous technologies, and multiple pedagogical approaches;
- It is not restricted to distance education; they also enrich classroom activities;
- It is a social space: educational interactions occur in the environment, turning spaces into places;
- It is a virtual space that is explicitly represented: the representation of this information / social space can vary from text to 3D immersive worlds; where students are not only active but also actors; they co-construct the virtual space;

### Content Management System (CMS)

It stores, loads and replays content. It may also enable teachers to organize and sequence this content for delivery to students. Such systems might have the facility to communicate this sequence to other teachers, allowing lesson structures to be used by more than one person. CMSs do not keep track of students' progress. Ideally, a CMS should allow users to import content from a range of different sources.

### Management Information system (MIS)

It performs the functions of a CMS but also keep track of students' progress as they work through the learning resources it stores. A VLE can be considered a part of a managed learning environment MLE if the data it records on students' progress are passed to the college or school management information system (MIS).

### Components of VLE

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

- e-mail facility
- assessments
- student home pages
- calendar
- file upload area
- multimedia resources
- conferencing tools course outline
- metadata
- assignments
- notice board/bulletin board
- synchronous collaboration tools

### Principal Functions of VLE

The principal functions that complete VLE needs to deliver are links to other administrative systems, both in house and externally.

### The typical learning of VLE

The typical learning that any VLE system facilitates are (Wellewr, 2007):

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

#### Perspectives of VLE

- administrators
- technicians
- Course developers /Teachers
- Learners

#### Features of VLE

- Personalized
- Continual updating
- Students as co-creators
- Based around services
- Reusable content and components
- open architecture
- Social software
- Harnessing collective intelligence
- Lightweight programming
- Reusable content and components

#### Stage process for choosing a VLE

Weller (2007) has suggested a six-stage process for choosing a VLE system are:

- Draw up a feature list
- Map to strategic objectives
- Devise a set of general principles
- Devise scenarios appropriate for ( your) organization / institution
- Engage in stakeholder consultation
- perform an external and internal review

#### Major tips with VLE

There are some major tips for getting started with VLEs are (Trinick, 2007):

- Investigate the usability and flexibility of different VLEs, as well as costs.
- Manage staff expectations- all of the benefits of VLEs won't be realized overnight – one step at a time.

- 
- Consult with your teachers and pupils- they are the ones who will be using it and it is vital that the system you deliver is appropriate to their needs.
  - Involve parents in the consultation process too- moving to a VLE is a culture change for all involved and it's important to get 'buy-in' from everyone right from the outset.

### Frameworks for VLE use

A useful framework for considering different ways of using VLEs to support or deliver courses is one developed by Mason (1998), which identifies three models:

#### Content and Support Model

Where pre-prepared content is delivered in print or online, 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. Relatively easy to establish but does not fully exploit the benefits of online learning.

#### 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.

#### 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 a group. Learning is very much student-centred and highly collaborative. Other useful models for evaluating virtual learning environments and developing online activities include: Britain and Liber adapted from Laurillard's Conversational Learning and Beer's Viable System Model, and Gilly Salmon's e-moderating Five Step Model.

#### Advantages of VLE

- Easy to use for both students and teachers
- easy online delivery of materials
- promotes better student –teacher interactivity
- assessment and monitoring of students
- electronic publication is cheaper and faster
- facilitated self-learning at the learner's convenient time and space
- general class administration and organization
- discussion and support with students on line

---

## Disadvantages of VLE

- Lack of student motivation.
- Many people find it daunting, especially at first.
- Training is required for both tutor and student.
- Online tutoring can be more time consuming than face-to-face tutoring.
- Learning is a social process and many people enjoy face-to-face interactions.
- Need to plan online support carefully to avoid overload.
- The student and tutor need basic information technology skills.
- The student and tutor need reliable access to computer and internet.

## Conclusion

The VLE, if used effectively, changes the entire teaching and learning experience by making learning very invigorating, vibrant and real. VLE support is dedicated to improving and enhancing the teaching and learning experience not only for the student but for the teachers as well. An appropriate and intelligent use of VLE system can bring a positive change in the scenario teaching-learning and learning outcomes in the field of education in India, and will be a march towards world class standards.

## Reference

- Dillenbourg. Pierre, Schneider, Danielabdsynteta, Paraskevi (2002). Virtual learning environments. <http://www.dil.iitb.ac.in/docs/IETC-Turkey.pdf> retrieved on Oct.02.2011.
- O'Leary, Ros. Virtual learning Environments. <http://www.bioscience.heacademy.ac.uk/ftp/resources/gc/clearn2.pdf> retrieved on Oct.25,2011.
- Weller, Martin (2007). Virtual Learning environments. Routledge: Taylor and Francis Group, London, p.44.

Ibid.p.01.

Ibid.p.15.

Ibid.p.537.

Ibid.p.106.

[www.du.ac.in](http://www.du.ac.in)

[www.ignou.ac](http://www.ignou.ac).