

# Education through VLEs: Drastic Need of the Hour

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## Abstract

A virtual learning environment (VLE) is a set of teaching and learning tools designed to enhance a student's learning experience by including computers and the internet in the learning process. It is a system for delivering learning materials to students via the web. These systems include assessment, student tracking, collaboration and communication tools. They can be accessed both on and off-campus, meaning that they can support students' learning outside the lecture hall 24 hours a day, seven days a week. This enables institutions to teach not only traditional full-time students but also those who cannot regularly visit the campus due to geographic or time restrictions, e.g. those on distance learning courses, doing evening classes, or workers studying part-time and various learning disabilities as well.

**Keywords:** Teaching and Training, Virtual Learning Environment.

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## INTRODUCTION

In the recent era of globalization, technological advancement has increased dramatically in every sphere including mainstream education "A virtual learning environment is a collection of integrated tools enabling the management of online learning, providing a delivery mechanism, student tracking, assessment and access to resources." One of the most significant differences between an interactive CD-ROM module and VLE delivery is the added element of communication:

- Tutors communicate with individual students or a group of students.
- Students communicate in a virtual classroom (chat rooms/synchronous) or in online group work over a period of time (discussion boards/asynchronous) or with their tutors (e-mail).

All participants should be able to feel that they are studying as part of a group, not working in isolation and without support. Another important difference is the ability with VLEs to track the progress of an individual student or to see how the understanding of a group of students is developing.

Common features of VLEs

- 'Quizzes'/Tests – CAL (Computer Assisted Learning) unlike the CD-ROM standalone version,

using a VLE enables the teacher to link to the institute's moderating system for grades/marks to be officially accumulated. Typically, a quiz will be used to find out how much of a large group session (lecture or online tutorial) a student has understood. A decision needs to be taken whether to restrict students to a single attempt, a small number of attempts or unlimited practice.

- Asynchronous Communication (Discussion Boards/Bulletin Boards) – the discussion is private to the group which has been predefined (often the small group which students are enrolled in for the duration of their course.) There are various methods by which contribution can be assessed.
- Synchronous Communication – chat room facility to take the place of a face to face meeting. Contribution is, properly speaking, in real time between two or more students online at the same time. The debate may resume at any time, but this form of communication tends to be less formal and non-assessed.
- Learning/Knowledge Objects – a knowledge object might be a video clip from a speech. It could become a learning object by adding a lesson to the video clip. The learning object can be catalogued so that it may subsequently be retrieved and repurposed in different contexts.

- Multimedia Tutorials – links to relevant databases or other information resources are usually included. A section of the primary text may appear on the screen alongside a webcast – for example a section of an Act. These are not by themselves VLE delivery, only if they are accessible over the Web. Otherwise they are used as standalone CDs.

### Significance in Teaching and Learning

#### Accessibility

The accessibility of the course is improved for students with special needs, and for distance learning and part time students. It can also make a difference to students in any category who learn best by being able to watch a video, or by interacting in a virtual environment instead of in the classroom, or by repeating their learning process at their own pace.

#### Interactivity

There is much evidence to show that students benefit from actively engaging with their course (Anderson and Elloumi, 2004). More specifically, the advantages relate to feedback, practice and customization.

#### Instant feedback

- Progress
- No time lag between completion and marking
- Correcting straight away

#### Practice

- ‘Doing’ aids learning
- Self directed
- Self paced

#### Customization

- Personalized study area

#### Communication

This is the element that marks out the VLE from other forms of e-learning and helps the student to feel part of a learning community. The areas in which this is most effective are assessment, bulletin boards, ad hoc instructions and ‘stop press’ items, and the facility to extend the module beyond the first few induction weeks of the first term. In detail:

#### Summative assessment

- Creates a dynamic (changing) student profile
- Makes the activities compulsory
- Provides students with the all important ‘pay back’

#### Bulletin boards

- Can be used as a forum for evaluating sources
- Provide opportunities for staff to support distance learners
- Contribute to the overall learning outcome, ie group work which counts

- Offer improvement over e-mail in terms of threaded discussions

Instructions, updates, alerts, current awareness:

- Add immediacy and dynamism
- Indicate the presence of the teacher

Continuum planning consisting of:

- Further modules after first term induction.
- Practice and revision throughout the course.
- A structured programme.

#### Practical Advantages

- Allows uninterrupted learning (the student does not have to break off to fetch a book or look for a password)
- Book is never ‘off the shelf’ (being used by another reader, sent for binding, missing)

#### Academic advantages

- Ensures the correct source is used
- Minimizes the risk of plagiarism as a result of a PC being logged in and left unattended
- Encourages concentrated working
- Allows students to select sources, promoting awareness of the strengths and weaknesses of different databases
- Allows ‘push’ technology for selected databases selected
- Promotes use of free quality Web services
- Can incorporate digitized collection of off-prints
- Highlights and utilises electronic versions of practitioner works

#### Multimedia functionality:

- Provides dynamism
- Facilitates delivery to many by a few
- Allows repeat/slow speed facility
- Allows pictorial representation
- Can be used to teach legal research in hard copy reference books where it is important to recognize the various component parts

### Effective material design and development

When designing VLE materials it is important that one should not work in isolation. The key to designing effective online courses and materials is collaboration. Training sessions can often be designed based on what individuals should know rather than what the audience needs to know.

- Talk directly to individuals currently receiving training to assess their learning needs
- Run a skills audit with existing legal research students

Discussing training needs and learning outcomes with staff will ensure the development of materials which enhance user learning. Holding regular

review meetings with tutors ought to encourage academic staff to promote the resource. It may also help to embed the training technology in teaching modules in the future.

### Design tips

These include:

- Divide course materials into clearly defined sections to create a user friendly learning environment
- Include an introductory information section to introduce and summarise the course. Provide details on:
  - Course aims and objectives
  - Navigating course and sections
  - Approximate time taken to complete the tutorial
  - Module timetable
  - Deadline information for activities (if appropriate)
  - Contact details for help and assistance
- Include navigational instructions on each content page
- Create master templates for pages of content, saving time and ensuring a uniform approach to page design; standardise design for page format, icons, font colour and headings ensuring a consistent layout
- Balance pages of content with text, images and space – too much text is time consuming to scroll through and concentration is easily lost
- No more than two screens of text should be used on any one page
- Link resources, such as your library website, to content pages – new webpages can therefore be accessed directly, without manually loading a second browser window (loading additional browser windows can be confusing for students who may only have basic technology skills)
- Check links to external resources regularly – external links can disappear without warning, causing frustration if resources are inaccessible (regular resources checks can be performed manually or by purchasing link checking software such as Netmechanic)
- Relate materials and activities, such as search strategies and examples, to other subject modules or to current study topics, to retain students' interest
- Online materials in a VLE must comply with disability access guidelines as a requirement of the Special Educational Needs and Disability Act 2001 (SENDA) – check your institution for inhouse guidelines on producing accessible Web materials (external bodies such as Netskills run courses in accessible Web design)

### CONCLUSION

As technologies continue to evolve, approaches to learning will continue to shift in order to better engage the modern learner. Look for the

following to come to virtual learning environments in the near future:

- Virtual science laboratories where students can conduct experiments or observe phenomena.
- Virtual humanities environments such as museums, archaeological sites, or historical time periods.
- Virtual corporate training spaces where employees can train on new equipment, attend meetings, and peruse documents.

When building a VLE, keep an eye on the future. New innovations are always around the corner. A flexible and interoperable learning platform will allow for easy expansion and integration of new technologies when they arrive, allowing you to scale your training programs for years to come. Don't settle for yesterday's education solutions when tomorrow is a brighter horizon.

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