



subject specialists

Resource Guide in:

Virtual Learning Environments (VLEs)

Introduction

Welcome to the LTSN Hospitality, Leisure, Sport & Tourism VLE resource guide! The goal of this resource is to point interested individuals in the right direction with respect to web-based resources on Virtual Learning Environments (VLEs). Whilst the focus of the resource will be as much as possible on VLEs, it will also provide links to resources in the more general area of technology assisted learning, as there is a great deal of overlap between issues surrounding VLEs in particular and technology assisted learning in general.

Hopefully this resource will be useful to individuals who have no experience of this form of delivery, through to those who are using VLEs to support their teaching in a major way.

Please feel free to send comments and feedback on this resource. Hopefully it will grow into a valuable tool for those in the hospitality, leisure, sport and tourism subject areas seeking information about technology assisted learning and VLEs in particular. If you feel you can make a contribution to this resource then please get in touch. I would welcome any contribution, from a useful website through to a submitted case study on your own use of VLEs within your teaching

I hope you find something of use.

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Glossary of Key VLE Related Terms

Terminology (and in particular the misuse of terminology) abounds in the area of VLEs. A number of the key terms are defined her. Links to some of the better glossaries in distance learning are also included.

- ***Asynchronous Learning***

According to the Asynchronous Learning Networks:

“Asynchronous Learning Networks (ALN) are people networks for anytime - anywhere learning. ALN combines self-study with substantial, rapid, asynchronous interactivity with others. In ALN learners use computer and communications technologies to work with remote learning resources, including coaches and other learners, but without the requirement to be online at the same time. The most common ALN communication tool is the World Wide Web.”

<http://www.aln.org/>

Robert Jackson has produced an excellent resource on Web Based Learning and defines asynchronous learning as “a type of communication that occurs with a time delay between steps in the dialog, allowing participants to respond at their own convenience. Literally “not synchronous”; in other words, not at the same time. Asynchronous capabilities give learners access to course materials, including readings, embedded and streamed multimedia, and external websites. They also let learners participate in facilitated discussions, and complete assignments individually and collaboratively”.

<http://www.knowledgeability.biz/weblearning/>

- ***Collaborative Learning***

According to Ted Panitz (1996), the underlying premise of collaborative learning is based upon consensus building through co-operation by group members.

This definition is taken from a useful article by Ted titled ‘A Definition of Collaborative vs Cooperative Learning’ that highlights in his view the distinction between collaborative and co-operative learning.

<http://www.lgu.ac.uk/deliberations/collab.learning/panitz2.html>

- ***Distance Learning***

‘Distance Learning’ is a general term used to cover the broad range of teaching and learning events in which the student is separated (at a distance) from the instructor, or other fellow learners.

A more detailed definition is provided by Moore & Kearsley (1996):

“Distance education is planned learning that normally occurs in a different place from teaching and as a result requires special techniques of course design, special instructional techniques, special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements”.

(From *Distance Education: A Systems View*. California: Wadsworth Publishing Company).

There is an excellent glossary of distance learning terms developed by Barry Willis and the University of Idaho Engineering Outreach staff. Well worth a look if you are baffled by the jargon.

<http://www.uidaho.edu/eo/dist13.html>

- **Distributed Learning**

A system and process that uses a variety of technologies, learning methodologies, online collaboration, and instructor facilitation to achieve applied learning results not possible from traditional education in a truly flexible, anytime/anywhere fashion.

- **E-Learning**

Covers a wide set of applications and processes, such as web-based learning, computer-based learning, virtual classrooms, and digital collaboration. It includes the delivery of content via Internet, intranet/extranet (LAN/WAN), audio- and videotape, satellite broadcast, interactive TV, and CD-ROM.

- **Managed Learning Environments (MLE)**

According to Joint Information Systems Committee (JISC) the term 'Managed Learning Environment' (MLE) refers to the whole range of information systems and processes of a college or university, (including its VLE if it has one), that contribute directly, or indirectly, to learning and the management of that learning.

<http://www.jisc.ac.uk/mle/issues.html>

If you are unsure about the difference between a virtual learning environment and a managed learning environment, then have a look at this JISC document outlining the distinction between the two terms.

<http://www.jisc.ac.uk/mle/reps/briefings/bp1.html>

- **Online Learning**

Learning delivered by web-based or Internet-based technologies.

- **Synchronous Learning**

A type of two-way communication that occurs with virtually no time delay, allowing participants to respond in real time. Also, a system in which regularly occurring events in timed intervals are kept in step using some form of electronic clocking mechanism.

<http://www.knowledgeability.biz/weblearning/>

- **Virtual Learning Environment (VLE)**

A useful description is provided by What is.com

“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. The principal components of a VLE package include curriculum mapping (breaking curriculum into sections that can be assigned and assessed), student tracking, online support for both teacher and student, electronic communication (e-mail, threaded discussions, chat, Web publishing), and Internet links to outside curriculum resources”.

http://whatis.techtarget.com/definition/0..sid9_gci866691.00.html

According to JISC, the principal components of a VLE are:

- mapping of the curriculum into elements (or 'chunks') that can be assessed and recorded
- tracking of student activity and achievement against these elements
- support of online learning, including access to learning resources, assessment and guidance
- online tutor support
- peer group support
 - general communications, including email, group discussion and web access links to other systems, both in-house and externally

<http://www.jisc.ac.uk/pub00/req-vle.html>

- **Virtual Universities**

A virtual university is literally a 'university without walls', where one can study on-line to achieve a degree. A number of formats exist and these are links to some of the better known sites.

Kentucky Virtual University (KYVU)

<http://www.kcvu.org/>

Western Governors University

An online university based in Salt Lake City, Utah and Denver, Colorado

<http://www.wgu.edu/wgu/index.html>

Jones International University

<http://jiu-web-a.jonesinternational.edu/eprise/main/JIU/home.html>

Clyde Virtual University

Clyde Virtual University is Europe's first virtual university and is the main forum for online university activities in the West of Scotland.

<http://cvu.strath.ac.uk/>

Examples of Virtual Learning Environments (VLEs)

This section of the resource provides direct links to some of the major players in the VLE field.

- **Blackboard**

Blackboard offers a suite of enterprise software products and services that power a total “e-Education Infrastructure” for schools, colleges, universities, and other education providers.

<http://www.blackboard.com>

- **Colloquia**

Colloquia is a software system that supports group working and group learning. It allows any user to set up a working or learning group around a particular topic (a context), add people to it, add resources (web pages, documents etc) to it, set up group tasks, and then engage in group and personal 'conversations' about the topic.

<http://www.colloquia.net/>

- **coMentor**

coMentor is a server-based learning environment that is concerned with providing live, interactive synchronous discussion spaces for learning conversations, along with the sharing of documents.

<http://comentor.hud.ac.uk/>

- **COSE**

COSE (Creation of Study Environments) is a server-based VLE, which supports the development and delivery of active learning content to learners working individually or in groups. It enables structured content to be prepared, managed and students to interact with it. It is now an open source product.

<http://web.staffs.ac.uk/COSE/>

- **Lotus Learning Space**

Learning Space is another well-known VLE produced by Lotus, a branch of IBM.

http://www.lotus.com/lotus/products.nsf/fa_prohomepage

- **Merlin**

Merlin is an asynchronous web-based learning environment which provides a simple to use, but flexible framework for e-learning, collaboration and resource sharing.

<http://www.hull.ac.uk/merlin/>

- **Nathan Bodington**

The Bodington software system is used by Leeds University and associated colleges to implement its virtual learning environment Bodington Common. It is now an open source project so that the worldwide academic community can use the software for free and can contribute to its development.

<http://www.fldu.leeds.ac.uk/bodingtoncommon.html>

- **Top Class**

WBT Systems TopClass e-Learning Suite™ is a robust web-based training platform with over a million users. It enables organisations to easily convert existing content and rapidly deploy to the web to maximize re-usability and deliver a measurable return on investment. WBT Systems is headquartered in Dublin, Ireland.

<http://www.wbtsystems.com/>

- **Virtual-U**

Virtual-U Software was originally developed at Simon Fraser University (SFU) in Vancouver, Canada, in association with the TeleLearning Network of Centres of Excellence (TL*NCE), and is online course delivery and management software.

<http://www.vlei.com/>

- **WebCT**

WebCT is one of the most popular providers of e-Learning solutions for higher education and is used in over 80 countries across 14 languages.

<http://www.webct.com/>

Evaluations and Comparisons of VLEs

A key decision (whether at an individual, or more likely institutional level) with regard to VLEs is which one to adopt. Web resources that describe, compare and provide an overview of VLEs are a useful starting point to get to grips with virtual learning.

- <http://ferl.becta.org.uk/display.cfm?page=76>

Ferl is an information service for UK staff working within the post-compulsory education sector and aims to support individuals and organisations in making effective use of ILT (Information Learning Technologies). Ferl is funded by the Learning and Skills Council and managed by Becta.

This is an excellent web resource – they have a section ‘Focus on Virtual Learning Environments’ which covers such issues as why have a VLE?, evaluating learning platforms, purchasing a VLE, staff development, piloting and mainstreaming a VLE, administration, case studies etc.

- <http://www.tlc1.murdoch.edu.au/teach/guide/res/examples/course-servers.html>

Roger Atkinson at **Murdoch University Online** provides an annotated set of 'ready reference' links to information generally about course server software, ie VLEs.

- <http://www.talisman.hw.ac.uk/>

This **JTAP TALiSMAN** project delivered a significant part of staff development courses through VLEs to the Scottish Higher Education Institutions (Scottish Metropolitan Area Networks). Section 2 of the project report ‘Delivering Staff and Professional Development using Virtual Learning Environments’, includes a summary and analysis of current delivery models, a survey of appropriate VLEs and recommendations of possible future delivery strategies. This material can also be found within the final JTAP report by Colin Milligan.

http://www.jtap.ac.uk/reports/htm/jtap-044.html#_Toc465744599

- http://vads.ahds.ac.uk/guides/using_guide/sect41.html

This resource, authored by Colin Milligan as part of the **Visual Arts Data Service**, based at the Surrey Institute of Art & Design, outlines a number of VLEs and provides a useful division of VLEs into those that are material-centred, learner-centred and collaboration-centred in their pedagogical approach.

- <http://www.edutools.info/course/productinfo/index.jsp>

The **EduTools** project is based on a website originally developed by British Columbia's Centre for Curriculum, Transfer & Technology and Bruce Landon. It provides an excellent analysis of selected course management software tools including product comparisons, reviews, and automated decision-making tools.

- <http://www.marshall.edu/it/cit/webct/compare/comparison.html>

Although a little dated (1999), Marshall University's **Center for Instructional Technology** have provided a useful table to compare and review VLEs under the following criteria: Developmental Features, Instructor Tools, Instructional Features,

Student Tools, Technical Support, Administrator Tools, Administrative Features, Software Costs and Hardware Costs.

- <http://www.knowledgeability.biz/weblearning/>

An excellent resource developed by Robert Jackson that catalogues tools, topics and issues of interest to those developing web-based learning. This page, one of three in the series, is an educators' resource for delivery and management of education via the Internet.

- <http://www.jisc.ac.uk/pub00/req-vle.html>

This report of the **MLE steering group** of the Joint Information Systems Committee (JISC) outlines the principal requirements for VLEs to be used in the further education sector within the UK.

- <http://www.chest.ac.uk/datasets/vle/>

To help VLE purchasers, CHEST has constructed a **Comparison Grid** for five popular VLE products, all of which were involved in the recent JISC Interoperability pilots.

- http://www.jtap.ac.uk/reports/htm/jtap-041.html#_Toc463843828

A Framework for Pedagogical Evaluation of Virtual Learning Environments, authored by Sandy Britain and Oleg Liber, University of Wales, Bangor is another very useful JTAP report that evaluates the properties, capabilities and orientation of different VLEs from an educational perspective.

Issues for VLEs

- **VLEs and Pedagogy**

<http://web.staffs.ac.uk/COSE/cosenew/posnan.html>

Effective Learning and the Virtual Learning Environment is a paper by Professor Mark Stiles of the Learning Development Centre, Staffordshire University, UK originally delivered at the European Universities Information Systems Congress – EUNIS 2000, "Towards Virtual Universities" in Poznan, Poland, April 2000. The paper highlights the importance of not ignoring the context in which learning occurs within a virtual environment, and provides an overview of the pedagogical principles that have driven the development of the JISC funded Creation of Study Environments (COSE) VLE at Staffordshire University.

<http://www.ltsn.ac.uk/genericcentre/index.asp?docid=17729>

Learning Environments and Pedagogy (LEAP) is a section of the LTSN Generic Centre website devoted to this topic. Fourteen case studies from seven universities look at how different pedagogies are being employed across different virtual learning environments (VLEs)- namely BlackBoard, WebCT and Lotus Notes.

- **VLEs and Disability**

<http://www.techdis.ac.uk/resources/stiles01.html>

Disability Access to Virtual Learning Environments, another paper by Professor Stiles, is available from the excellent TechDis site, describing a study undertaken to identify the problems encountered by disabled students when using VLE's.

<http://www.techdis.ac.uk/resources/VLE002.html>

Virtual Learning Environment User Testing Project, another paper from the TechDis site written by Shirley Evans, Royal National College for the Blind, Allan Sutherland at TechDis, and RNC Task Force, RNCB Hereford, outlining how to make a virtual learning environment (VLE) accessible to students with disabilities and in particular those who have a visual impairment.

- **VLEs and MLEs (Managed Learning Environments)**

http://www.jisc.ac.uk/index.cfm?name=mle_home

A key issue emerging within the lifelong learning agenda is the seamless transition of 'student' information both within and across academic institutions. The JISC (Joint Information Systems Committee) MLE Steering Group is very active in this area. They define a virtual learning environment as the online interactions between learners and tutors, whilst the term Managed Learning Environment (MLE) "is used to include the whole range of information systems and processes of a college (including its VLE if it has one) that contribute directly, or indirectly, to learning and the management of that learning."

A very useful explanation of the issues concerning the development of MLES can be found at JISC's website including an overview of MLE's, demonstration projects, advice and briefing reports.

See also links to JISC MLE material from the Glossary Area

http://www.hlst.ltsn.ac.uk/projects/specialists/erskine_glossaries.html

VLE Material at LTSN Subject Centres

- http://www.hlst.ltsn.ac.uk/projects/project_10.html

Through this project, ***Virtual Learning Environments in Hospitality, Leisure, Tourism and Sport - A Review***, David Botterill and Claire Haven provide an excellent review of the current status of VLE application in founding partner institutions of LTSN for Hospitality, Leisure, Sport and Tourism.

A number of the LTSN subject centres provide excellent resources for their subject networks on Virtual Learning Environments. Here are some of the more useful ones that currently exist.

- <http://www.economics.ltsn.ac.uk/handbook/vle/>

A ***VLE Handbook for Economic Lecturers*** has been written by Ros O'Leary and Andy Ramsden at University of Bristol. This excellent resource outlines the features of VLEs, levels of use, how VLEs can be used in practice and case study material from an Economics department – a really useful introduction to VLEs.

- <http://www.ltsn.ac.uk/genericcentre>

The ***LTSN Generic Centre*** has provided a useful overview of VLEs – what they involve and how they can benefit your teaching – a useful starting place. Go to Resources, then select e-Learning.

- http://dbweb.liv.ac.uk/ltsnpsc/briefing_papers/vle5.htm

Paul Chin of the ***LTSN Physical Sciences*** at the University of Hull, provides some very useful advice on choosing a VLE.

VLE Related E-Journals

These are links to some of the more useful e-journals in the Communication & Information Technology area. Whilst they cover broader issues (primarily they are about distance learning), many of the articles are dealing with issues that users of VLEs encounter.

- ***The Technology Source***

The Technology Source is an excellent peer-reviewed bi-monthly periodical published by the Michigan Virtual University providing thoughtful and useful articles in the area of technology assisted learning. Well worth bookmarking.

<http://ts.mivu.org/default.asp>

- ***The Journal of Asynchronous Learning Networks (JALN)***

JALN is published online by the Sloan Center of OnLine Education and aims to publish original work in the area of asynchronous learning networks (ALN).

<http://www.aln.org/alnweb/journal/jaln.htm>

- ***Journal of International Forum of Educational Technology & Society***

Educational Technology & Society publishes academic articles on the issues affecting the developers of educational systems and educators who implement and manage such systems.

<http://ifets.ieee.org/periodical/>

- ***EDUCAUSE Quarterly***

Formerly CAUSE/EFFECT this is a practitioner's journal, published four times a year, about managing and using information resources in higher education academic technology,

- ***Learning Technology Newsletter***

A publication of IEEE Computer Society, the Learning Technology Newsletter aims to report the activities of Learning Technology Task Force including various announcements, work in progress, projects, participation opportunities, additions/modifications to the web-site and so on.

http://ltnf.ieee.org/learn_tech/

- ***SYLLABUS***

SYLLABUS is a monthly magazine that focuses exclusively on the use of high tech in higher education, providing a platform for advancing IT solutions at the college level.

<http://www.syllabus.com/>

Professional Bodies in Technology Assisted Learning

- ***Association for Learning Technology***

The ALT is an educational organisation which seeks to bring together all those with an interest in the use of learning technology in higher and further education.

<http://www.alt.ac.uk/>

- ***EDUCAUSE***

EDUCAUSE is an American-based nonprofit association whose mission is to advance higher education by promoting the intelligent use of information technology. It publishes EDUCAUSE Quarterly magazine.

<http://www.educause.edu/>

- ***The TLT Group***

The TLT Group has helped over 500 educational institutions and corporations around the world to improve teaching and learning by making more thoughtful use of information technology. Probably best known for the award-winning Flashlight Program (<http://www.tltgroup.org/programs/flashlight.html>), which provides a bundle of 25 different resources to its 280+ subscribing institutions, including tool kits (such as Flashlight Online), study packages (such as a package for assessing your institution's course management systems use), rubrics, tutorials, and other materials. Flashlight also provides external evaluation, training, and other consultation, working closely with Flashlight Network member institutions.

<http://www.tltgroup.org/default.htm>

Upcoming Conferences

- ***ALT-C 2003***

The tenth anniversary conference on the Association for Learning Technology (ALT) will be held on 8-10th September 2003 in Sheffield, UK. The conference will cater for those interested in the application of learning technology in further and higher education and other comparable settings and will include a research strand for refereed papers on e-learning and use of learning technology.

<http://www.shef.ac.uk/alt/>

Reviews of VLE Related Articles

This section of the resource guide will review and summarise web-published articles that deal with VLE related matters. It is hoped that eventually a range of articles across hospitality, leisure, sport and tourism will be available.

General Articles

Virtual Teaching in Higher Education: The New Intellectual Superhighway or Just Another Traffic Jam?

<http://www.csun.edu/sociology/virexp.htm>

In this article Jerald Schutte reports the results of empirical research to assess the merits of a traditional, versus virtual, classroom environment on student test performance and student affect toward the experience.

Hospitality Articles

If you wish to submit a review of an article that examines the use of VLE's within the field of Hospitality, then please contact John Erskine at j.w.erskine@staffs.ac.uk

Leisure Articles

If you wish to submit a review of an article that examines the use of VLE's within the field of Leisure, then please contact John Erskine at j.w.erskine@staffs.ac.uk

Tourism Articles

If you wish to submit a review of an article that examines the use of VLE's within the field of Tourism, then please contact John Erskine at j.w.erskine@staffs.ac.uk

Sport Articles

Article Reference

Sandercock, G.R.H. & Shaw, G. (1999). Learners' performance and evaluation of attitudes towards web course tolls in the delivery of an applied sport science module. *ALN Magazine*, 3(2). Retrieved December 12, 2002, from:

http://www.aln.org/alnweb/magazine/Vol3_issue2/sandercock.htm

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Review

Within the subject area of sport, there are few published studies that have examined the impact of a VLE on academic performance within the area of sport. As such the study by Sandercock and Gray (1999) is welcome.

The study utilised a design to compare the academic results of students who received a traditionally delivered applied sports science module in a given semester (control group) with students who received the same module, but with Web Course Tools [Web CT] support in a second semester (experimental group). In addition the study also examined (via qualitative means) students' perceptions of the impact of using WebCT as a support for learning.

The authors outline that the experimental group had access to (1) lecture notes and other material posted within the VLE, (2) guides to online journals and documents, (3) access to a noticeboard/discussion area and, (4) a mock examination.

The two groups (n=80) were tested for any initial differences on age, gender balance, A-Level points, with no differences emerging on these variables. Coursework and examination marks were then compared across the groups and again no differences were found, suggesting that WebCT did not affect student academic performance in comparison to the control group.

Analysis of student evaluation of the module again revealed no differences between the two groups.

Fifty per cent of the students who experienced the WebCT module also completed an online questionnaire. These students reported a positive evaluation of the VLE elements of the module, including increased understanding of Communication and Information Technology, easier access to course materials and a majority (61%) agreed that the VLE improved course delivery. However, as the authors point out this sample may not have been a true reflection of all of the students who experienced the WebCT delivery.

Commentary

The rationale for comparing traditional delivery with VLE delivery is not without its critics. A number of researchers argue that it is fairly fruitless to compare two forms of delivery, as the nature of the teaching experience is so altered, that it is very difficult to isolate any impact of the VLE from other changes in pedagogy that occur when this approach to delivery is adopted. However, the present study does point out that only a minority of students (28%) from the experimental group who experienced the WebCT delivery felt it altered the module as much as they had expected.

To their credit, the authors combined both quantitative and qualitative data collection to address the question of interest.

It would have been helpful to have more details of the types of activities students were asked to engage in - for example if notes were available to them, what were they required to do with them and was this monitored? What was the actual role of the discussion board for the experimental group? How exactly was the qualitative questionnaire developed? – it would have been helpful to see a full version of the questionnaire.

The authors hint that WebCT material may not have been interactive enough – would you therefore expect assessment differences between the groups if the material was not directly influencing understanding via active learning? Perhaps a short additional test (in addition to the formal assessment of the module) could have been given to both groups to assess fundamental levels of understanding of the module's key concepts. In addition, as the groups represented students on two different degrees (Sports Therapy and Sport Science), it might have been helpful to assess for any knowledge-based differences which existed at the outset of the module, ahead of content delivery. Finally, it is unclear whether the control group receiving a traditionally delivered module experienced a similar type of mock exam to that receive by the experimental group.

Overall, this is an interesting and unique (to the subject discipline) study examining the impact of VLE delivery within an applied sports science module on performance and attitudes of sport students. Hopefully this study will act as a forerunner for other researchers in sport to look at the impact of VLEs on student learning.