# Virtual Learning Environment

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## Abstract

There has been a sea change in the ways how education is provided with the application of new ICTs. Using Internet and WWW to support teaching or learning has become a trend in modern higher education. Providing LIS Education in Virtual Learning Environment (VLE) has become an issue today. This study aims to fill this void. Our work focuses on the effectiveness of a technology-mediated virtual learning environment in the context of basic information technology skills training. Grounded in the technology-mediated learning literature, this study presents a framework that addresses the relationship between the learner control and learning effectiveness. Delivery of library services has also been in existence such an environment. As such it is a big issue and challenges before the LIS Schools and Libraries. The present paper highlighting Virtual Learning Environments, How can Virtual Learning Environments support learning and teaching, Advantages and disadvantages of Virtual Learning, Factors for effective use of virtual learning, LIS Education in Virtual Learning Environment.

**Keywords:** Virtual Learning Environment, Library and Information Science, Learning and Teaching, Virtual Learning.

## Introduction

The University which supports its research/educational and administrative activities which leap over the boundaries of time and space can be termed as a virtual learning. The idea of virtual learning concepts includes distance learning and virtual classes. The ideal educational development of virtual learning is created by the support of infra information systems. The rapid strides made in the field of ICT have also led to a paradigm shift in education and training in all fields and the borderless library plays a vital role. More and more individuals are taking courses to distance education to relish their dreams. To cater to this large segment of learners, a number of institutions including the virtual institutions have started offering a wide range of courses on the web called web-based education tutorials or online courses or virtual courses. The web collects and creates knowledge resources from any place any time. Thus, it acts as collaborator between the creators and users of knowledge and become a part of the global knowledge network. Again the emergence of Open Source Software (OSS) has also brought a drastic change the way how information is delivered and accessible freely. Such advancements in ICTs in the web era have enabled the LIS Schools to provide education by adopting maximum technologies in a Virtual Learning Environment (VLE). Modern library systems are also coming up to deliver their services in such an environment.

## Objectives of the paper
- To review literature on the emergence of VLEs in higher education
- To illustrate the scale and scope of VLE application
- To provide qualitative data on the levels of understanding of VLEs and experiences
- To establish information on strategy, decision-making, staff training and assessments of VLEs
- To provide recommendations on the further application of VLEs

## What is Virtual Learning Environment?

Virtual learning Environment is a term that contains the online learning services. This is also called learning platform that organizes and provides access to online learning services for the students, Open Access to Textual and Multimedia Content. These services include access control, provision of learning content, e-learning tools and administration of user groups. In much literature, different terminologies have been used for the term "virtual learning" as:
- Internet learning
- Distributed learning
- Network learning
- Online learning
- Tele learning
- E-learning
- Computer assisted learning
- Distance learning
- Web-based learning
- Federated learning

These terms have given us an indication that in Virtual learning environment, the learner
- is at a far off place from the tutor or teacher or instructor;
- uses some form of technology (obviously internet connected computer)
- access the learning resource materials which are web-based;
- also interacts with the teacher/tutor or instructor and other learners;
- is provided with some form of support to meet his/her needs.

## How can Virtual Learning Environments support learning and teaching?

The tools and features that comprise the VLE aim to facilitate a complete learning and teaching experience, and include:

**Communication between tutors and students:** e.g. email, discussion boards and virtual chat facilities which support various types of communication: synchronous and asynchronous, one-to-one, one-to-many and many-to-many.

**Self-assessment and summative assessment:** e.g. multiple-choice assessment with automated marking and immediate feedback.

**Delivery of learning resources and materials:** e.g. through the provision of learning and teaching materials, images and video clips, links to other web resources, online discussion and assessment activities.

**Shared work group areas:** Allows designated groups of students to upload and share files as well as communicate with each other.

**Support for students:** Could take the form of communication with tutors or other students, provision of supporting materials such as course information and Frequently Asked Questions (FAQs).

**Student tools:** e.g. individual student web pages, 'drop boxes' for the upload of course-work, electronic diaries and calendars.

**Management and tracking of students:** e.g. usernames and passwords to ensure that only registered students can access the course; analysis of assessment undertaken by students or their use of materials within the VLE.

**Consistent and customisable look and feel:** A standard user interface that is easy for students to understand and use. Courses can be individualised with colours, graphics and logos – but the essential mode of use remains constant.

**Navigation structure:** Structured delivery of information supported by a standard navigation toolbar. Most VLE software assumes that students will work their way through linear sequences of instructional material. Others are more flexible and will accommodate alternative information structures, e.g. multi-path case studies.

**Frameworks for VLE:** use A useful framework for considering different ways of using VLEs to support or deliver courses is one developed by Mason3, which identifies 3 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, ie 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 Liber4 adapted from Laurillard's Conversational Learning and Beer's Viable System Model, and Gilly Salmon's emoderating Five Step Model5.

## Advantages

As with any technology used in teaching and learning, VLEs have no intrinsic educational value in themselves. The way in which online courses and online activities are designed and delivered can add value and increase effectiveness. Below are some commonly perceived advantages and disadvantages of using VLEs.

- Easy online delivery of materials.
- Easy to use for both students and lecturers.
- Widens student access on and off campus to learning materials and resources.
- Offers flexible support for educators who do not need to be in a fixed time or place to support and communicate with students.
- Has the potential for new ways of learning and teaching such as active and independent learning which make use of online communication, online assessment and collaborative learning
- Flexibility of 'anytime, anywhere' access
- There can be learning gains in ICT, writing, understanding and presentation skills
- Improved motivation and engagement
- Development of higher level learning styles
- New approaches to learning through online discussion forums
- Increased self-study by student teachers willing to make the commitment to the technology and to sharing personal views and experiences
- Passive student teachers are encouraged to contribute more effectively
- Student teachers using online seminars can increase their participation and performance
- Improved confidence in student teachers and enhanced practice and collaboration
- Parents are more likely to be engaged in the school community
- Parents can monitor their child's progress more easily
- Access to online content supports homework studies out of school hours

## Disadvantages
- Can become a 'dumping ground' for materials not designed to be delivered online
- Copyright and IPR of materials need to be considered.
- Off campus access to hardware and networks can be problematic for both students and educators and raises issues of equality. Disability legislation and accessibility to online materials also need to be considered.
- Need to plan online support carefully to avoid overload.
- Such independent learning still needs to be guided and supported. Appropriate training and ongoing support is still needed for both students and educators.

## Factors for effective use
- Teachers need to evaluate VLEs from an educational perspective to determine whether the new technology can be embedded into the teaching and learning of their institution
- Teachers need to learn new skills to moderate online discussions, create online content and develop online tutoring techniques
- Common standards are essential for transferring data and content easily between systems within an institution and between sectors
- Support staff such as librarians need to be involved in the development of VLEs in partnership with course tutors
- Training for all staff and reliable technical support are crucial.

## LIS Education in VLE
The scope for LIS Education has undergone changes with the rapid expansion of knowledge and development of research activities, particularly in the area of ICT. For qualitative improvement of LIS education in VLE, there is need to introduce new courses based on ICTs in different LIS schools to face the challenges. In fact ICT has not only affected operations of library services but also LIS education. As such there is a need to integrate the qualitative changes in the LIS Education:
- to increase quality of LIS students
- to meet demands of the market in e-environment
- to face the challenges due to fast development of ICT and its impact
- on LIS Education  to suit increasing demands for trained LIS professionals
- to increase job opportunities for LIS professionals
- to use internet based e-courses which are increasing day-by-day
- to adopt e-publishing which is being increasingly accepted by the users
- to transform traditional mode of LIS education in India.

- Proper utilization of educational technology for imparting courses can produce better results. It has become essential to consider the utilization of virtual learning environment in the LIS education.

## Conclusion
Virtual learning is really the new age of learning. The future of Virtual learning is very bright. This idea has been mounting at a very rapid rate as more and more uses for the computer in education have been discovered and attempted in Indian educational scenario. There is an explosion in information and it is beyond the edge of places. It is available everywhere. Interactive web is creating new thresholds of the hour. Virtual learning is the future of e-learning. As an impact of the globalization and ICT revolution as well, there is generally an agreed implication that education and training in LIS should go in the tune of the same. LIS schools all over the world, as such, are accepting the new technologies. In this regard, India is lagging behind in comparison with other advanced counties like, US, UK, etc. The establishment of the Indian Training and Education Network for Development (INTEND) by the Ministry of Human Resource Development, Government of India is a good approach of the government. The initiatives taken up by IGNOU are a good signal 187 in the country. Web-based mode of teaching has become an important component of LIS Education in India. The use of new ICT by the Indian LIS Schools should be encouraged to produce professionals to manage knowledge resources in the VLE.

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