Abstract

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 recent trend in computer based education is to move beyond traditional ways towards more interactive media and hyper media, where computing and communication technology are combined to make flexible connections. The method combines media such as writing paragraphs, video, sound, graphic and computing to forum is called virtual classroom. A virtual classroom is a learning environment created in the virtual space. The objectives of a virtual classroom are to improve access to advanced educational experiences by allowing students and instructors to participate in remote learning communities using personal computers; and to improve the quality and effectiveness of education by using the computer to support a collaborative learning process. Virtual learning provides a learning system. As virtual classroom offers a flexible self-paced, self-centred learning is very help for the students. Students come to a place nearer, use the technology and even know how the technologies are very important in the daily life and also the computer simulation used in wide variety in almost all fields. There by educational goals and objectives can be achieved.

1. INTRODUCTION

The proliferation of personal computer combined with the internet has precipitated far-reaching changes in the society. Electronic communications and digital networks are transforming the way work and reshaping personal communication and entertainment. This transformation has a tremendous effect on the need opportunity to learn.
Unfortunately the transmission model still dominates higher education has changed little, E-learning as the gradual development phase of this transformative medium and is yet to experience its explosive effects in higher education. We are experiencing e-learning in its early forms and have much to learn of inherent capabilities and the creation of a new ‘learning ecology’. E-learning transforms education in ways that extend beyond the efficient delivery or entertainment value of traditional approaches. E-learning cannot be ignored by those who are seriously committed to enhancing teaching – learning in higher education. The web as a communications tool has been developed and refined to stimulate all of the formats undertaken using earlier technologies – including the face-to-face classroom.

1.1 Meaning Of Virtual Learning Environment (VLE)
A virtual learning environment is a term that refers to technology which supports teaching and learning; it involves collaboration, communication and content tools, as well as providing students with an online personal learning space. It enables teaching and learning to take place anywhere at any time – a college / university with no physical boundaries.

According to Dillenbourg et al. (2002) Virtual Learning Environment

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

1.2 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 these sequences to other teacher allowing lesson structure to be used by more than one person content management systems do not keep track of students’ progress. Ideally, a CMS should allow users to import content from a range of different sources.

2. CONCEPT OF VIRTUAL LEARNING ENVIRONMENT (VLE)
It performs the functions of a CMS but also keeps track of students’ progress as they work through the learning resources it stores. A VLE can be considered 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).

![Virtual Learning Environment](https://www.dreamstime.com)

**Figure 1: An overview of Virtual learning environment**

*Source: [www.dreamstime.com](https://www.dreamstime.com)*

**Components of VLE**
- Notice board / bulletin board;
- Course outline (course structure, assignments, assessment dates);
- E-mail facility;
- Conferencing tools (asynchronous conferencing discussing);
- Student home pages;
- Metadata (ability to add metadata to resources);
- Assignments (ability for tutor to create assignments);
- Assessments;
- Synchronous collaboration tools (such as whiteboards, chat and video conferencing);
- Multimedia resources (accessing, storing and creation);
- File upload area (ability for students to upload their resources to a shared area);
- Calendar.

**2.1 Functions of VLE**
- Controlled access to curriculum that has been mapped to elements (or “chunks”) that can be separately assessed and recorded. (Computer Curricula 2001, [http://www.acm.org/sigcse/cc2001/](http://www.acm.org/sigcse/cc2001/), the new curriculum for computing developed by the association for Computing Machinery, ACM, and IEEE-CS, is a fresh document waiting for the application of such an approach).
• Tracking student activity and achievement against these elements using simple processes for course administration and student tracking that make it possible for tutors to define and set up a course with accompanying materials and activities to direct, guide, and monitor learner progress.

• Support of online learning, including access to learning resources, assessment, and guidance, the learning resources may vary from self-developed to professionally authored and purchased materials that can be imported and made available for use by learners.

• Communication between the learner, the tutor, and other learning support specialists to provide direct support and feedback for learners, as well as peer-ground communications that build a sense of group identity and community of interest.

• Links to other administrative systems, both in – house and externally.

2.2 The Typical Learning That Any VLE System Facilitates Are:

• Community of practice / socio-cultural learning ;
• Resource – based learning;
• Peer learning;
• Content – led / instructivist learning ;
• Collaborative learning ;
• Instructor – led leaning ;

A’ Herran (2000) suggests that there are four perspectives from which a VLE system should be analyzed:

• Administrators – scalability, value for money and integration with existing systems are important for the users.
• Technician – robustness, user base, technical support and ease of maintenance will be significant.
• Course developers or Teachers – customizability, flexibility, and the integration of legacy materials will be paramount.
• Learners – consistency, accessibility and quality of design will be main concerns.

2.3 The features VLE 2.0 are as follows:

a) Personalized ;
b) Continual updating ;
c) Students as co-creators ;
d) Based around services ;
e) Reusable content and components ;
f) Lightweight programming ;
g) Social software ;
h) Harnessing collective intelligence ;
i) Open architecture.
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Weller (2007) has suggested a six stage process for choosing a VLE system as given below:

1) Devise scenario appropriate for your organization / institution.
2) Engage in stakeholder consultation.
3) Perform an external and internal review.
4) Devise a set general principles;
5) Draw up a feature list.
6) Map to strategic objectives.

### 2.3 Getting Started With VLEs

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

i.) Don’t automatically opt for the solution the college next door or your LEA recommends—your VLE choice is unique to your needs and circumstances.

ii.) Investigate the usability and flexibility of benefits of VLEs won’t be realized overnight one step at a time.

iii.) Manage staff expectations of the benefits of VLEs won’t be realized overnight—one step at a time.

iv.) 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.

v.) Involve parents in the consultation process too moving to a VLE is culture change for all involved and it’s important to get ‘buy-in’ from everyone right from the outset.

vi.) Do not under estimate the staff training and resources that will be needed to make your VLE strategy a success. Consider the flexibility of a specialist outsourced provided for VLE training and support.

### 3. ADVANTAGES AND DISADVANTAGES OF VLE

As with any technology used in teaching and learning, VLEs have no intrinsic educational value in themselves. The way in which online activities are designed and delivered can add value and increases effectiveness. O’Leary has been given some commonly perceived advantages and disadvantages of using VLEs.

#### Advantages

VLE can help teaching and support staff’s management and deliver a variety of daily tasks, including:

- General class administration and organization.
- The creation of lesson plans using existing resources.
- Assessment and monitoring of students.
- Allocation and marking of on-line assignments.
- Discussion and support with students online.
- Submit and track their assignments online via a personal home page.
- Contribute to and participate in discussions with classmates and other schools via the various conferencing tools.
Work at their own pace within and out of school this is particularly beneficial to learners with special educational needs, such students in hospital or children unable to attend regular classes for health reasons.

- Facilities self-learning at the learner’s convenient time and place.
- Electronic publication is cheaper and faster.
- Facilities faster and cheaper and cheaper delivery of material.
- Promotes better teacher student interactivity.
- Easy online delivery of materials.
- Easy to use for both students and teachers.
- Widens students access on and off campus to learning materials and resources.
- Offers flexible support for educators who do not communicate with the 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.

**Disadvantages**

The following are the disadvantages of VLE;

- The student and tutor need reliable access to a computer and internet.
- The student and tutor need basic information technology skills.
- Training is required for both tutor and student.
- The development of high quality learning materials is time consuming and expensive.
- Online tutoring can be more time consuming then face to face tutoring.
- Learning is a social process and many people enjoy face interaction.
- The use of the large virtual learning environments is expensive and may demand additional equipment and specialized staff.
- Some learning environments require state of the art computers and the most up to date browser.
- Blended solutions can be expensive as they may involve the development of expensive online learning resources and providing technology based support as well as face to face support.
- 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. Stability legislation and accessibility to online materials also need to be considered.
- Need to plan online support carefully to avoid.
Such independent learning still needs to be guided and supported. Appropriate training and ongoing support is still needed for both students and educators.

Lack of student motivation.

Many people find it daunting, especially at first.

4. CONCLUSION

“Virtual Learning Environment” as a range of systems that comprise features likes a designed information space, a social space being a “place”, participants that are active and present actors. We argue that using a virtual learning environment does not guarantee effectiveness per se. it must integrate with rich pedagogical scenarios and these scenarios must profit from its various facilitating features. Applying the “virtual learning environment” concept any sort of internet technology (classic web sites, learning management systems, 3d environments, etc.) entails the danger of ignoring interesting avenues of research and development that could and should enrich education (Dillenbourg et al., 2002) there have been many advances in the world of education and the VLE is by far the most exciting and provocative evaluation to happen yet. The VLE, if used effectively, changes the entire support is dedicated to improving and enhancing the teaching and learning experience not only for the student but for the teacher as well.

5. REFERENCES
