

VIRTUAL CLASSROOM: A BOON TO LEARNERS

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ABSTRACT

Demands for a more personalized approach to education as well as flexibility have spurred learners to seek alternatives to the traditional approach. As a result of technological advantages in society, the options for learning in and outside the classroom have broadened tremendously. The great option is "Virtual classroom". A virtual classroom is a system that creates an environment designed to facilitate teachers in the management of educational courses for their students, especially a system using computer hardware and software, which involves distance learning. Education in the virtual classrooms has been described as being "just as vivid, meaningful and dynamic as face-to-face interactions in a traditional classroom or even more so". As the virtual classroom is one that aims to give the student an experience equal to or better than the sort they would find in a traditional classroom, there are obviously many advantages of the virtual classroom to the student, as well as the teacher and the associated educational institution. Virtual classrooms "foster the dimensions of interest, involvement, imagination, and interactivity", which make the virtual classroom an "immersive environment in which to learn", perhaps even more immersive than the traditional classroom because of what is offered by new technologies used in the virtual classroom. This paper discusses the virtual classroom as a new move in the non-formal distance education, which is an advanced technique of Education Technology. The Collaborative and Independent virtual learning types form the key features for Communication, Assessment and Support. Moreover, a comparison of this virtual classroom with the traditional classroom blooms out the merits of virtual classroom which is definitely "A Boon to the Learners".

Keywords: Virtual Environment, Virtual Learning, Distance Education.

INTRODUCTION

Education is the touchstone of survival, the cutting edge of new knowledge and the guardian of the great human tradition. It is the maker of a prosperous society. In confronting many challenges that the future holds in store, mankind sees in education and indispensable asset in its attempt to attain the ideals of peace, freedom and social justice. Education is not a miracle cure or a magical formula opening the door to a world in which all ideals will be attained, but it is one of the principal means available to foster a deeper and a more harmonious form of human development and thereby to reduce poverty, exclusion, ignorance, oppression and war.

In its border sense, education means the process of development from infancy to maturity. It begins at birth and continues throughout life. Education becomes the

sum total of experience that the child receives inside the school or outside, through the library, the playground, the workshop or through other agencies. Education is the social experience through which children learn themselves, develop interpersonal skills and acquire basic knowledge. Education leads to improved knowledge, increase in skills, change in attitudes, finally culminating in improved efficiency. As the level of education increases from the primary to the secondary, from the secondary to the higher secondary and then to the collegiate level, the number of skilled professionals such as doctors, engineers, scientists, nurses and teachers increase. The improved human resource along with the natural resource of a country paves way for increased economic development.

New Moves in Non- formal Education

Education has a very important role to play in the present set up of world. Investment in the education of its youth is considered as most vital by all modern nations. Such an investment understands/acquires top priority in developing countries. Along with the knowledge explosion that is found in developed countries, we see another factor, namely population explosion, particularly in developing countries that is trying to change the pattern of life. Most countries in the world are faced in same form or another, with these problems and what is needed today is an "Education Explosion".

We cannot deny the fact that there has been an explosion of knowledge in the world. Along with that there have been unprecedented changes in the communication technologies. Students need to know how to learn independently to deal with this explosion of knowledge. To meet these challenges, virtual learning has emerged which paves way for convenient learning.

Formal education is completely systematized, well structured and arranged age wise, i.e., it starts from primary and goes up to university level education. And also, formal education is controlled by rules, time, place and syllabus.

Non- formal education is started for those who are unable to get formal education, who are incomplete in their school studies, those who are living in places where there are no schools and colleges. This non- formal education is considered as a way to find out the solutions for their problems like uncomfortable working hours of schools and colleges, their location, distance, etc.

In our national perception, education is essential for all. This is fundamental to our all round development, material and spiritual. The National Policy of 1986 laid stress on the need,

- ? For a radical reconstruction of the education system
- ? To improve the quality of education at all stages
- ? Of giving much greater attention to science and technology
- ? Of cultivating moral values and a closer relation between education and the life of the people.

Hence, the Education in broad terms means, "The life-long process of acquiring new knowledge and skills through both formal and informal exposure to information, ideas and experiences". Education in narrow terms means, "Systematic planned instruction that takes place in school and out of school situation".

Technology provides the necessary answer to all these problems. Technology of education is being developed with the aim of not only making education more widely available, but also of improving the quality of education which is already available. The current technology revolution with the concomitant process of globalization of economies has unleashed formidable social force for structural changes in our society. Cracks are already visible in the monolithic structures of education all over the world. Recent advances in our understanding of the process of learning through a wide range of scientific disciplines and new knowledge-based technologies are also converging in the form of a revolution and impacting on the traditional system of teaching and learning.

Research in Virtual Learning

Baker. Et. al., (2009) studied on "Using virtual worlds in education: second life as an educational tool". He stated that the online virtual world Second Life ([www. secondlife. com](http://www.secondlife.com)) has multiple potential uses in teaching and that in Second Life (SL), users create avatars that represent them in the virtual world.

Barbour et. al.,(2009) studied the reality of virtual schools and illustrated the benefits associated with virtual schooling such as expanding educational access, providing high-quality learning opportunities, improving student outcomes and skills, allowing for educational choice, and achieving administrative efficiency.

LaPointe et. al. (2008) studied on student's perceptions of the value and efficacy of an online learning community. They indicated that although some students found the virtual community helpful to their learning, others perceived the online peer connections as superfluous and inconvenient, and not supportive of their online learning processes. They also suggested that the new reality created by online learning demands a

reassessment of the understanding of the most productive student engagement.

Savin-Baden and Maggi (2008) studied on shifting perceptions of learning in immersive virtual worlds. He me established the fact that learning in immersive virtual worlds (simulations and virtual worlds such as Second life) could become a central learning approach in many curricula.

Hargis and Jace (2008) studied virtual learning as a second life for distance learning. He connected the virtual world to the essential next step in our learning and communicating approach, elect racy. Attending to the medium as well as the method in which people now process information can assist in maximizing the power of virtual learning environments such as Second Life.

Berge and Jane, (2008) studied on multi-user virtual environments for education and learning. They stated that "Second Life" is a popular example of an immersive, three-dimensional, virtual world and there is a good deal of potential for education and training to occur in multi-user virtual environments (MUVes), if designed properly, especially when the goals involve role playing, simulation, and peer interaction.

Stiles.M.J. (2000) delivered a Keynote at the 2000 European Universities Information Systems Congress - EUNIS 2000 -"Towards Virtual Universities" in Poznan, Poland on April 2000 on "Effective Learning and the Virtual Learning Environment". He illustrated that using Virtual Learning Environments (VLEs) poses important educational issues for Universities. Without addressing the issues of effective learning, their use can compound the mistakes of the past and leave the learner with a passive, unengaging experience leading to surface learning.

Marileena Koskela et. al., examined the suitability of a VLE for higher education by comparing learning with a VLE and learning in a traditional lecture on an occupational safety engineering course. They compared the learning results and the students' opinions of their learning process and found that the VLE students outperformed the lecture students.

Virtual Learning - A recent Technique of Educational Technology

Educational Institutions reflect the purposes and problems of the society in which they are nurtured. They must also rely upon the human talents and technical As capabilities of the culture in which they must discharge their functions. As the tasks of any modern profession increase in size and complexity, two immediate effects can be noted (I) a growing demand for more highly trained professional workers and (ii) a tendency to marshal technological resources to assist or amplify the efforts of professional workers and reduce the drain of mechanical and repetitive chores. This is the case with modern education. Both quantitatively and qualitatively, we have here a truly formidable task. Never before has any society been faced with the problem of providing so much learning to so many and with so much at stake. The problems can be tackled through Educational Technology if applied in the proper way. Educational Technology is useful in making learning experiences and practical trainings. It has peeped into the fields of motivation, sensation- perception, attention, evaluation etc. Educational Technology can be used effectively for formal, informal and non- formal systems of education

Educational Technology is a study which explains the usage of psychological theories and scientific concepts in teaching learning process. Enormous growth of electronic media has made one to educate easily, according to his need and wish by using the technique of Educational technology. In particular, the self-learning methods have become more prominent and are used everywhere. The concept of Educational Technology has passed on through a few generations in the evolution.

- ? The first generation may be termed as the 'Tool Technology/Instrument Technology' where the teaching aids and materials had the status of tools or aids for helping the teachers to disseminate information clearly to the students.
- ? The second generation may be known as 'Concept Technology'. The application of psychological learning theories, principles, models, methods and

techniques of teaching and learning can be involved in this generation. The concept of self-learning and software like PLM, CAI etc., were the outcome of this generation.

- ? The third generation of Educational Technology is 'Systems technology'. The systems analysis and systems approach to education came as a boon to the educationists. Here teaching- learning is analyzed in terms of input, process and output/ outcome.
- ? The fourth generation could be the 'Electronic and Interactive Media' like Computers, Internet and Virtual Conferences like Audio conferencing, Video conferencing, Teleconferencing and Computer conferencing etc. The use of electronic Media and other Information and Communication Technologies is leading up to e- learning Technologies for teaching and learning the subjects.
- ? The paucity of time for teachers to go back to classrooms, has given way to the unique concept of e-learning as an effective tool for education. E-learning means different things to different people. It could be defined as the usage of network technologies to create, foster, deliver and facilitate learning any time, and anywhere.

The hallmark of e-learning is that it creates a virtual climate, an electronic environment in which distances between the interacting persons are blurred and engage of information between students, teachers and professionals can take place freely. The virtual learning was primarily introduced to facilitate distance learning. It refers to a "hypermedia based instructional program which utilizes the attributes and resources of the World Wide Web to create a meaningful learning environment where learning is fostered and supported. It is an individualized or group instruction delivered over a public or private computer networks and displayed by a web browser.

Virtual learning is considered as the peak of growth of Educational Technology. This simplifies the teaching learning process. At the same time, it includes

meaningful, wide aims and objectives and methods. It is planned based on the needs and facilities of learners. It is money saving and there are no rules and time limits. Those who cannot get proper education due to social, economical or political reasons can utilize this virtual learning. Education field is benefited a lot through this technique.

Virtual classroom is a learning environment that exists solely in the form of digital content that is stored, accessed and exchanged through networked computer and information systems. Everything in a virtual classroom occurs in a non- physical environment; student accesses the classroom by connecting to the internet, rather than traveling to a real, physical classroom. The students may even be in the same country as the instructor or teacher; the nature of virtual classrooms means that in terms of access, the geographic location of students is not an issue.

The Virtual Classroom and Traditional Classroom:

A Comparison

Many characteristics of the traditional classroom have been carried over into the virtual classroom. Both employ similar learning theory, curriculum design and pedagogy. Teaching in both the traditional and virtual classroom is learner-centered. But there are some key differences between the traditional and virtual classroom. These differences concern place and time, size, content delivery and communication modes.

The traditional classroom is a physical room that must be visited at an appropriate time in order to be participated in, while a virtual classroom is not physically accessed. Some virtual classrooms may suggest an optimum number of students; they can generally accommodate a larger student than the real classrooms.

The structure of the content in both classrooms is relatively similar, but the means by which content is transferred from the teacher to student differs greatly. In virtual classroom, content is delivered using discussion board, chat rooms, email, etc. But in the real classroom, that they are text based. However, verbal/visual cues like body language, eye contact are not present in virtual classroom.

Merits of Virtual Classroom

1. Virtual classrooms can provide relevant and rewarding experiences.
2. New technologies provide more effective means of delivery.
3. Academically, virtual classrooms prove to be motivating contexts for learning.
4. The learning experience can be flexible, more accessible and inclusive.
5. Virtual learning is a more economically viable option.
6. Preference in giving education is eliminated. (People of any religion, language and caste are considered one).
7. Unrestricted freedom is given in learning.
8. More chances are given to learners for their active participation in learning.
9. Creativity is encouraged.
10. Learning process becomes more effective due to the use of multi-media.

Virtual Classroom and Learning Styles

Within the virtual classroom two main styles of learning are evident; these are collaborative learning and active or independent learning. Both styles add to the student's education, but collaborative learning is said to be more prominent and better suited to the nature of a virtual classroom.

Collaborative Learning

Collaborative learning as an environment in which both the teachers and learners are active participants in the learning process; knowledge is not something that is delivered to students but rather something that emerges from active dialogue among those who seek to understand and apply concepts and techniques. The virtual classroom demands this kind of learning in order to overcome the absence of face- to face communication. In such an environment, students and teachers work together to make learning rich and more beneficial.

Independent Learning

Independent learning differs from collaborative learning in that the student does not interact with the other students. In such environments the interaction takes place exclusively between the teacher and the student and learning, is completely self directed.

Features of Virtual Classroom

The key technologies and features found in the virtual classroom can be grouped into three primary areas. They are as follows:

- ? Communication/Participation
- ? Assessment
- ? Support

All these areas have certain tools that enable success of education in the virtual classroom.

Communication/Participation Tools

- ? e-mail
- ? Announcements
- ? Discussion boards
- ? File transfers and file management.
- ? Chat rooms
- ? White boards
- ? Journals and notes
- ? Video/audio conferencing

All of these tools are the means of communication and transfer of information between students and the teacher. Some of these tools, such as the chat rooms and white boards, enable real-time or synchronous communication (i.e.) chat can occur between the teacher and the learner in real-time, which is similar to face-to-face conversation in the traditional classroom.

While other tools, such as the discussion boards and e-mail, enable a synchronous communication (i.e.) communication occurs at convenient times that suit student schedules and are not necessarily accessed at simultaneous (or) prearranged times.

Assessment

Some standard tools are used for assessing the performance of the students in virtual classrooms. These

tools may include quizzes, portfolio and presentation areas, online examinations and grading books.

Support

Some tools are used in the virtual classroom to provide additional support to the student. These tools may include calendars, search engines, and online help portals and guides.

Conclusion

Educational technology specifically virtual classroom growth doesn't mean leaving the teachers jobless. Instead, it helps the teacher to give the best education to the learners by using the new technological equipments and methods. Virtual learning is considered as peak of the growth of the education technology, at the same time, the virtual classroom is still relatively new concept. Future developments in virtual learning will be largely dependent not only on new technologies, but on the willingness of teachers and learners to embrace them. But with the current focus on handheld devices unrestricted by time, space, it is believed that we are on the verge of a new form of learning where reality and virtuality become interconnected.

References

- [1]. Baker, Suzanne C.; Wentz, Ryan K.; Woods, Madison M. 2009. *Using Virtual Worlds in Education: Second Life[R] as an Educational Tool* (Ej825432)
- [2]. Barbour, Michael K.; Reeves, Thomas C. 2009. *The Reality of Virtual Schools: A Review of the Literature* (Ej823142)

[3]. Berge and Jane, (2008). *Multi-User Virtual Environments for Education and Training? A Critical Review of "Second Life"* (Ej792161)

[4]. Cuthell, J.P.(2003) Virtual Learning In J.Kirjonen (Ed.), *Knowledge work and occupational competence*, (pp. 23-37) Jyväskylä, Finland: Institute for Educational Research.

[5]. Gaurav Chandha and Nafay kumail S.M(2002) *e-Learning An Expression of knowledge Economy*, Tata McGraw. Hill publishing company Ltd, New Delhi.

[6]. Hargis and Jace (2008). *A Second Life for Distance Learning* (Ed501107)

[7]. LaPointe, Lorelee; Reisetter, Marcy. 2008. *Belonging Online: Students' Perceptions of the Value and Efficacy of an Online Learning Community* (Ej810076)

[8]. Marileena Koskela, Piia Kiltti, Inka Vilpola and Janne Tervonen. *Suitability of a Virtual Learning Environment for Higher Education*. Tampere University of Technology, Finland.

[9]. Raju PVL (Editor) (2002) *E-Learning Concepts and Cases*, The ICFAI University press, Hyderabad.

[10]. Savin-Baden, Maggi. 2008. *From Cognitive Capability to Social Reform? Shifting Perceptions of Learning in Immersive Virtual Worlds* (Ej822140).

[11]. Stiles.M.J. (2000). "Towards Virtual Universities". *Proceedings: EUNIS 2000 - Towards Virtual Universities*, Instytut Informatyki Politechniki Poznanskiej, Poznan April 2000, ISBN 83 913639 1 0

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