

Constructive e-Learning: An Outstanding Way of Lifelong Learning

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Abstract—The word ‘Lifelong Learning’ itself says that learn lifelong if you want to live lifelong in this modern world of information and communication technology, world of competition and change. Because of increasing competition and change in every field of education, economy and life, the need to keep up-to-date professionally, along with a rising standard of competencies, have compelled to make studying an ongoing and lifelong process. Constructive E-Learning is an outstanding way of lifelong learning and developing knowledge, skills and abilities of all sorts of learners with its variety of modes as blog learning, mobile learning, discovery learning, simulated learning, online learning, web based learning, etc. The governments have to take comprehensive efforts to address the digital divide for lifelong learning and harmonious development of individuals in particular and the entire countries in general.

Index Terms—Constructive e-learning, lifelong learning, modes of constructive e-learning.

I. INTRODUCTION

Lifelong learning is an irrefutable demand of the time. Harvey Ullman, A great philosopher said, “Anyone who stops learning is old, whether this happens at twenty or eighty. Anyone who keeps on learning not only remains young, but becomes constantly more valuable regardless of physical capacity.”[1] Thus, the importance of Lifelong learning has been stressed throughout the world.

The Report of the Education Commission (1964-66) mentioned that education does not end with schooling but is a lifelong process. The National Policy on Education in India - 1986 considered Lifelong Education as the cherished goal of the educational process which presupposes universal literacy, provision of opportunities for youth, housewives, agricultural and industrial workers and professionals to continue the education of their choice at the pace suited to them.

II. LIFELONG LEARNING THROUGH TECHNOLOGY

Lifelong learning is nothing but consistent learning by people throughout their lifespan and covering all of life from the cradle to the grave (Smith & Spurling, 1999) [2]. According to European Commission (2000), “*Lifelong learning can be defined as all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competence, within a personal, civil, and social or*

employment related perspective.” Lifelong learning develops natural abilities, creates a curious & hungry mind, increases our wisdom, helps us to adopt change, make us active contributors to society and enriches life of self-fulfillment.

The rapid development of computer and Internet technologies has dramatically increased the ways of teaching and learning. Every day is coming up with a new innovation and change in all spheres of education, economy and electronic technology. Because of increasing competition everywhere the need to keep up-to-date professionally, along with a rising standard of competencies, have compelled to make studying an ongoing and lifelong process.

According to W. B. Yeats, “*Education is not the filling of a pail, but the lighting of a fire.*” It is proved by various researches throughout the world that education is possible when a learner is interested to learn. As learning is a self motivated activity, everyone learns the knowledge, things and skills related to his or her own area of interest. The Digital learners of 21st century are more creative, inventive, self motivated and goal oriented. They are the constructors of a new era of knowledge economy and society. They are the constructors of knowledge rather than the passive vessels to be filled with knowledge. They have the potential to think in a scientific way; examining opinions & ideas logically, inquiring, experimenting, analyzing and drawing out conclusion. Through this process they gain deeper knowledge and insight. Plato rightly said, “*Do not train children in learning by force and harshness, but direct them to it by what amuses their minds, so that you may be better able to discover with accuracy the peculiar bent of the genius of each.*” [3]

III. CONSTRUCTIVE E-LEARNING

Constructivism is the idea which believes that we build new knowledge based on our past and current information, knowledge and experience; the new knowledge then reshapes the things we already know as we ‘construct’ our view of the world. Constructivism is often regarded as paragon pedagogy for e-learning. E-learning actively engages learners and gives them such a variety of options of what to study, where to study, how to study and with whom.

I would define Constructive E-learning, as “The construction of knowledge through an active mental and social process by learners via E-learning which covers a wide set of applications and processes of online and offline learning resources of digital appliances.” Constructive E-learning forces learners to be explorers searching out information, making connections and constructing knowledge through a number of digital devices.

Manuscript received May 30, 2012; revised June 12, 2012.

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IV. MODES OF CONSTRUCTIVE E-LEARNING

The question arises in our mind that how constructive E-learning facilitates lifelong learning. There are various modes of constructive E-learning which facilitate lifelong learning which can be accessed anytime and anywhere in the world.

A. Blog Learning

A blog is a web-based space for writing where all the writing and editing of information is managed through a web browser and is immediately and publicly available on the Internet (Armstrong & Berry) [4]. Blog is effective for learners of all kind to document their learning, share experience and knowledge, comment on different topics and issues and have direct interaction with peers throughout the world. It is a tool to encourage learners' reflective learning and communication. We can find thousands of blogs on internet that can be categories as; personal, educational, academic, political, social, religious, travel, environmental, economic, etc. Blogs are widely disseminating knowledge and experiences through worldwide interactions and collaborations.

B. Discovery Learning

Discovery learning is one of the important ways of constructing knowledge. Seymour Papert, an educationist states, "You can't teach people everything they need to know. The best you can do is position them where they can find what they need to know when they need to know it." [5] I will say, when a learner want to know something tell him to go, access the internet and explore what do you want. We discover a lot of things while surfing on the Internet and using electronic appliances' of communication. Internet is a huge universe of knowledge where every learner discovers a lot of things useful in his personal, professional and social life.

C. Discussion Boards

A discussion board is an asynchronous communication tool that allows one individual to post a comment or question online [6]. Other individuals who are members of the same discussion board may read that comment or question, and respond with their own remarks over time. Discussion forums, bulletin boards, and message boards typically refer to the same type of system. There are millions of internet users and therefore the number of discussion boards as well. It is a mean of enriching knowledge and experience where you can express your opinions and points and get the same by others.

D. Educational Software

Educational software is computer software, the primary purpose of which is teaching or self learning (Wikipedia) [7]. An immense number of educational software are developed and released to study anatomy, languages, science, mathematics, music, geography, history, environmental science, dictionaries, encyclopedia, programming, etc. In Maharashtra, Navneet publications and Chanakya Mandal Publications have made educational software on syllabus of 1st to 12th standard. This Educational software has started a new revolution of self and lifelong learning where restrictions of formal education break down.

E. Game Based Learning

Game based learning is a tool of edutainment; education + entertainment for learners of all ages and fields. It is a solution for knowledge workers whose priority is to do their hob rather than training course (Prensky, 2001). Games can classified as language games, news games (used in journalism), training games, simulation games, games for health, exergaming (used for exercise), art games, productivity games, etc. Hundreds of games can be accessed online or offline and expected knowledge and skills will be unconsciously grasped by the learner which is useful in real life. Flight Gear' game is widely used simulation driving different vehicles, Transport Tycoon is a simulation of management of specific industries and Virtonomics is a universal business simulation.

F. Interactions through Digital Appliances

Paloff and Pratt (1999) says, "The keys to the learning process are the interactions among students themselves, the interactions between faculty and students, and the collaboration in learning that results from these interactions." ICT allows learners to interact, communicate and collaborate with content experts, teachers and with fellow students around the globe. Interaction means like mobiles, discussion boards, blogs, conferencing, e-mail and chat groups allow learners throughout the world to collaborate and exchange information, experiences and strategies and create a learning society.

G. Mobile Learning

Any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile technologies which include all sorts of mobiles and personal digital appliances (Wikipedia). Today, Mobiles and PDPs are small gateways to the treasure of knowledge. Electronic PDPs enable learners to easily audit, record, store books, communications, audios & videos, games, learning software and reflect on their learning anytime and anywhere (Cesarini, 2009) [8]. Learners can access all internet resources, dictionaries, learning software, games, videos, audios, text, etc. through mobiles.

H. Online Learning

When we are connected to internet, it is said that we are online. Online learning is nothing but learning with different resources of internet such as webzines, websites, journals, wikis, blogs, online dictionaries, encyclopedias, libraries, lectures and discussion, seminars, etc. If you just type 'lifelong learning' on Google, you will see 1.2 billion hits. This is the richness of knowledge resources of internet. Learners explore information from all these online resources and construct their own knowledge for different purposes.

I. Simulated Learning

Simulated learning has a long history. Simulation is the imitation of real things, acts, events, skills and processes. Simulated learning is nothing but learning with such simulations. The digital nature of simulated learning can be seen in the forms of computer simulations. Computer Simulations can be found in almost all faculties of education, such as, language education, automobile stimulator,

biomechanics stimulators, engineering stimulators, economics stimulators, military stimulators, marine stimulators, robotics stimulators, sales and production process stimulators, satellite navigation stimulator, flight stimulator, fight stimulators, driving stimulators, etc. Simulations are also found in the form of games. Therefore, simulated learning on computer or mobiles also serves as an important mean of lifelong learning.

J. Virtual Learning Communities

A virtual community is a social network of individuals who interact through specific media, potentially crossing geographical and political boundaries in order to pursue mutual interests or goals. There are thousands of learning communities belonging to different fields of education, economy and society on social networking websites; collaborating, commenting, sharing information and experiences and learning beyond the geographical boundaries of their countries.

K. Web based Learning

Web (World Wide Web) is a rich source of information on internet. It includes learning material, discussion forums, video conferencing, live lectures, links to other sources of information; all are possible through the web. The present digital generation is spending a lot of time before computer screens and hunting all sorts of information. There are approximately 182 Million websites on internet; providing different knowledge services to the entire mankind. These websites are the rich resources for learners from each and every field of education and economy for their lifelong learning.

V. CONCLUSION

Constructive E-learning makes learning more independent, individualized, interactive and interdisciplinary. In this era of knowledge explosion, policymakers, knowledge workers, ICT specialist, educational programmers, corporate, teachers and learners need to work together to enrich all the constructive modes of e-learning for the lifelong learning. They should make more games, simulations, discussion boards, blogs, websites, learning material, educational mobile software, learning communities, and chat groups to facilitate constructive e-learning and to harness the benefits for Global developments.

The constructive E-learning is serving an outstanding way of lifelong learning and developing knowledge, skills and abilities of all sorts of learners. If we want to take advantage of ICT then there are various measures to be taken by governments and people all over the world. The cost of digital appliances and internet service should be reduced. They should be affordable by people from all economic classes.

It is the responsibility of the government to ensure ICT

facilities and affordability in rural and remote areas as 70% of their population is living there. The digital divide in rural, tribal and urban societies encompasses the accessibility, affordability, capacity to use ICTs and the availability of digital content of knowledge and information jostling through the electronic networks.

The government has to take comprehensive efforts to address the digital divide. The following measures should be taken to address the digital divide and to provide ICTs to the people of rural and remote areas; the physical infrastructure of ICTs should be set up in rural and remote areas for easy accessibility, ICTs should be within economic affordability of rural and tribal people, various projects can be initiated for the awareness and training to use ICT resources for people of rural and remote areas, translation of E-content should be encouraged in local languages. As far as concern of financial expenditure on ICT, every developing and undeveloped country will take time to gather funds for it.

I conclude by quoting Brain Tracy, who said, "Commit yourself to lifelong learning. The most valuable asset you will ever have is your mind and what you put into it."

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