

EFFICACY OF E-LEARNING FOR VALUE INCULCATION: A LITERATURE REVIEW

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Abstract: Education is the prime necessity of the present context. The education of 21st century has brought a massive outflow of revolution with innovative ideas and techniques. This has not only changed our insights but also our vision towards the system of education. The shifting of face-to-face classroom teaching-learning to technology-based teaching-learning is influencing education system and it is expected to continue. Use of technology has now become an inseparable part in the teaching-learning. It has great implication in the teaching-learning process and its application on education system called as educational technology. E-learning is an important and unique contribution of technology to education system. E-learning maximizes the learning opportunities, it enables to access to more knowledge and skills. E-learning also need to contributed to value education in 21st century fastest changing world; as because, value in Indian education from ancient period believe to be for man making which must be included in any types of learning. Thus, this paper intended to study, how far use of technology in learning successful for value inculcation or to show the efficacy of e-learning for value inculcation through the review of various literatures.

Key Words: Efficacy, e-learning, value inculcation, literature review.

1. INTRODUCTION :

Learning is the relatively permanent modification in behavior of child through experiences. Learning is an endless process which promotes knowledge and develops various skills in the child. As technology makes many works easier, simple and quicker, now it has taken the place of many works. In the teaching-learning field also, technology has created an important place. In the year 1945, Govt of India under the higher education department established All India Council for Technical Education (AICTE) in order to plan, manage and develop technical education in the education system of India.

Technology cannot be isolated from social and environmental context. Technology brings people- individuals, communities and nations- closer together and create better possibilities for collaboration and exchange of ideas and knowledge. Use of technology brings positive changes in the multicultural classroom throughout the world. It develops a network that promote students' collaboration both within their country and with students abroad. Proper use of technology may contribute to social development. As e-learning is a part of technology, it has also a great role to play in the context of society. E-learning is the use of multimedia technologies and internet to improve the quality of learning by facilitating access to resources and the services as well as remote exchanges and collaboration.

1.1 E-learning

Learning in which we take the help of technology or any electronic medias may be called as e-learning. E-learning is the use of information and communication technology (ICT) to deliver instructions where instructors and learners are separated by distance or time. E-learning covers a wide set of applications and processes, including computer-based learning, web-based learning, virtual classrooms, and digital collaborations (Urdu & Weggen, 2000). E-learning is the acquisition and use of knowledge distributed and facilitated primarily by electronic means (NCSA, 2000). E-learning or online learning is the use of internet technologies to deliver a broad array of solutions that enhance knowledge and performance. knowledge distributed and facilitated primarily by electronic means. E-learning refers to the use of various kinds of electronic media and information and communication technologies (ICT) in education (Selvom & Sumathi, 2016). Hortan (2011) defines e-learning as a set of instructions delivered through all electronic

media i.e. internet, intranets, and extranet by eliminating the barriers of distance and time. Shortly e-learning can define as online access to learning resources, anywhere and anytime (Holmes & Gardner, 2006). E-learning term often alternately use as online learning, web-based learning, internet-based teaching (IBT), technology-enhanced learning (TEL), computer-based teaching (CBT) and the like. Some of the popular e-learning examples are-

- Blended learning
- MOOC
- Distance Education
- BYJU'S
- SWAYAM
- Storyboarding/Digital Storytelling

1.2 Advantages and Disadvantages of E- Learning

In the pandemic COVID-19 moment the only thing that suitable to the situation is online learning in the education system, as face to face mode often not possible at the time. When comparing to the traditional face to face mode classroom teaching-learning, e-learning has the many advantages and disadvantages as well.

1.2.1 Advantages of E-learning

Garrison (2011), Katoua et al. (2016), Selvom & Sumathi (2016), and others supported the following advantages of e-learning:

- It is less expensive and it saves time as it reduces travel costs and reduces travel time.
- E-learning can occur in or out of the classroom.
- It creates new ways for both teachers and students to interact, engage and contribute to learning.
- Teachers have the chance to be able to teach at more than one place simultaneously.
- E-learning enable students to access computer and the internet connection from anywhere at any time. So, it has flexibility in terms of availability.
- It takes into consideration of individual differences. It is self-pacing as because slow or quick learners both given opportunities based on their satisfaction.
- Students can access all the materials resources available according to their interest and knowledge.
- Learner can track their progress time to time. Easy self-assessment is possible.
- It helps learner to develop new knowledge about using latest technology and internet.
- Develop a competency in both teacher and students with the proper training.
- It is also helpful in improving quality of teaching.

1.2.2 Disadvantages of E-learning

Bounik & Marcus (2006), Katoua et al. (2016), Selvom & Sumathi (2016), stated the following disadvantages:

- Lack of adequate e-learning strategies and training to staff members.
- E-learning does not facilitate interpersonal and direct interaction between teacher and students.
- Learners with low motivation may fall behind.
- There are the chances of dropout.
- Students may feel isolated from the instructor and classmates.
- As compared to face-to-face mode teaching-learning, e-learning process is less efficient with respect to clarification, explanation and interpretation and instructor may not always be available when students need help.
- Slow internet, not availability of electronic media of students may be considered as disadvantages.
- Hands-on or lab work is difficult to stimulate in a virtual classroom.
- Managing computer files and online learning software can seem complex for students sometimes.

These were some advantages which make e-learning a successful tool and its disadvantages sometimes become hindrances in the way of its development. E-learning is an alternate to face-to-face mode. If proper implementation of e-learning taken place, then there is the possibility that e-learning will become an integral part of education system one day. Through e-learning transmission of different knowledges and skills is possible. Value is one of the components may come under learning of different skills that is need to be inculcate in student. Value is the very old concept that have never been neglected in Indian education.

1.3 Values

There is the continuous erosion of values, a major challenge now education facing is that how to inculcate values among students in the present continuously growing world. The concept value, occupy a central position and able to unify the diverse interests of all the sciences concerned with human behavior (Schwartz,1992). Values are set of

principles or standards of behavior. Value is nothing, but anything which satisfy human needs or desires and it's gives information about what is right or wrong/ good or bad/moral or immoral which ultimately leads to the development of selves and further helpful in surviving and living in the world (Yadav, 2007).

Types of values as discussed in the Chand (2017) and Aggarwal & Husain (2016) are: -

- *Personal Values* (honesty, responsibility)
- *Social Value* (Justice, equality)
- *Moral Value* (respect, gratitude)
- *Spiritual Value* (Self-discipline, self-control)
- *Universal value* (brotherhood, compassion)
- *Political Value* (democracy, welfare)
- *Economic Value* (ownership, saving) and
- *Cultural value* (customs, ethics & aesthetics).

A teacher here plays a pivotal role in inculcating value in education and orienting the students towards a proper direction. Value inculcation can be taken place by the teacher by using stories of great personalities, by applying new methods of teaching like problem-solving & group discussion, by creating awareness about the nature conservation, compassion and so on. In teaching-learning by applying various methods and approaches, like- stories, classroom incident/anecdote/conflicts, biography, work experiences and a positive or negative reinforcement by teacher, may help in value inculcation (Chand, 2017)).

Many believe that today's learning by its technological means made learners mechanical. Modern education has failed to produce citizens of character and integrity (Rai, 2014). In this time, it's a tough task to inculcation of value through technology education. Still technology is in its way to fulfil the thirst of present education system and human needs.

Basic Content Categories	BIOLOGICAL NEEDS OF INDIVIDUAL	COORDINATED SOCIAL INTERACTION		SURVIVAL AND WELFARE NEED OF GROUPS		
Sub-Categories	PERSONAL	SOCIAL	ECONOMIC	POLITICAL	CULTURAL	ENVIRONM-ENTAL
Values	Industry Creativity Independence Competence Health Safety Interest Wise Decision-making	Benevolence Conformity Equity Social order	Wealth-Creation Wealth-distribution Productivity	Needs of minorities of gender, race, ethnicity, disability	Tradition Aesthetics	Environmental Sensitivity

(Table.1. A Typology of Values in Technology Education, Source: Prime, 1993)

1.4. Value inculcation through e-learning

In a rapid changing world, people now realizing that they need to develop their knowledge and skills continuously. E-learning is helpful to all ages for continuously developing the skills. As e-learning facilitates new learning skills; values and social responsibilities are not apart from this. E-learning enables students to act responsibly by keeping in mind the community interests, showing ethical behavior in workplace and community context (Holmes & Gardner, 2006). Students can gain information from the many disciplines which may teach them different arts, cultures, history and all. E-learning helpful in pumping following values by creating social learning environment (Garrison, 2011, Holmes & Gardner, 2006):

- *Unity in diversity*- E-learning, because of diversity of its content and various subject based on diversity of culture, it gives a sense of unity in diversity.
- *Responsibilities*- Students take responsibilities by leading a discussion group and by developing specific elements of course content.
- *Determination*- Students empowered with responsibilities by using technical tools of learning and they become determinant towards their course.
- *Co-operation/ Collaboration*- By sharing new knowledge, concepts, meaning and ideas, and by receiving support and feedback from community, a collaboration in learning can be found.
- *Self-regulation/ self-assessment*- Time to time as learners are aware about their progress, they do self-assessment and try to improve themselves on the basis of previous performances.
- *Fostering motivation* -E-learning environment is relatively interesting, attractive and challenging which motivates students to get engage in the study. E-learning motivates students to interact with each other and to share and exchange the ideas of each other. A sense of achievement and pleasurable learning environment motivates students for e-learning.
- *Encouraging curiosity*- Because of space, color, animation and sound uses in the e-learning, it attracted the learners. Courses of e-learning are effective and approaches of it create a zeal to study and create interest among students to know about different subjects.

2. LITERATURE REVIEW ON EFFICACY OF E-LEARNING FOR VALUE INCULCATION:

Prime (1993) stated that the goal of technology is to enhance the quality of human life. Every new technology involves values as it is directed towards social value. The study of the technologies of other cultures makes children aware about the value-system that differ from their own culture.

Jansen et al. (2002) agree on those specific value-added values of e-learning depends on the type of learning and suggested various value-added model for it. E-learning is a means to offer new and specific values in ICT in education. E-learning as an environment for development, brings efficacy through re-use. As compared to traditional learning e-learning provide various scope by implementing ICT in education.

Pavlova (2002) argued that typology of values in technology does not helpful in guiding practice of teachers. Thus, for understanding of values it must be beneficial to distinct between intrinsic value (*good in itself*- responsible, honest, helpful, self-controlled and so on) and instrumental value (*a means towards end*-beauty, equality, freedom, happiness and so on). The importance of moral value highlighted by providing an important role of teachers here.

Muhammad et al. (2013) believed that e-learning is one of the important outcomes of ICT. E-learning enhance interaction between teachers/educators and students but it is some extent to deficient in developing ethical values among students as there is no physical interaction between teacher and students. In order to incorporating ethical value in e-learning, in online course there must be involvement of parents, family, members of the society.

Samir et al (2014) show the interactive features of e-learning in their paper that increases the motivation of the students. They stated that it is not as easy to motivate students in online, thus in order to motivate students in online learning teachers has to face the challenges to; encouraging interaction and collaboration, explaining online environment, building study group, constructing learning material and being aware about the present emotional condition of the students

Ahmed et al. (2015) in their study stated that science and technology has always a great impact on human survival, it strengthens human value when it is constructive and which is weakens human values that is disruptive technology. Hence, success of technology depends on how deep the human values are embedded in it. One of the positive impacts of technology is; it establishes the highest set of moral, ethical and human value.

Handan (2015) intended to determine the opinion of university students on value education through distance education. And it revealed that, value education is a necessary component of social life that the open distance learning must include it. It is a training for individual, as it is contributed to students' social learning and facilitates maintaining social order. It enables them to appreciate the values like honesty, respect, love, tolerance and all.

Signe & Rikke (2015) the study tried to discovered how effectiveness is e-learning. Key factors that influence the effectiveness of e-learning discussed in the study. Several learning strategies, pre-defined objectives, collaboration, confidence of students, motivation, self-efficacy and self-assessment of students (can successfully report their own practice, these all makes e-learning effective.

Tuan (2015) Studied to test the effectiveness of e-learning as comparison to face to face format. And the study revealed the positive findings of e-learning is that: students improved perception of learning, they engaged with the class material, stronger sense of community among students.

Sun & Chen (2016) stated that online teaching proved effective if there is the presence of social, cognitive and teaching. On the basis of these three primary-element, successful online education relied. An online learning community provides platform for students to learn effectively by engaging themselves in the teaching. Social presence implies to the presence of students fully socially and emotionally, interaction with other individual, collaboration and all.

Toufaily et al. (2018) found out in their study that e-learning experiences derived benefits of the different values i.e., social value (family, culture), personal value (self-actualization, personal development), functional value (reputation, career advancement, employment opportunities) and epistemic value (novelty, new knowledge). They also agree on that value is more relevant during e-learning process.

Panyajamorn et al. (2018) in this study it has described a way to design effective e-learning content that improve learners' abilities like motivation, satisfaction and experiences. E-learning is also help in removing inequality among rural and urban. And result also showed that selected patterns of content and design were effective in mathematics and reading subjects in both rural and urban area.

Pradana (2018) investigated to promote values by using Seesaw application as an online learning. Most of the students taken part in this online learning. The study analyzed different values which affected by the application of Seesaw online learning. The values like, loving, friendship, responsibility, caring, social awareness and all developed in students. Online learning has an effect on students' value development.

3. METHOD :

This is a study based on review of accessible published literature, which is based on testing the effectiveness of e-learning for value inculcation. A total of 13 studies were analyzed here.

4. ANALYSIS & DISCUSSION :

Though technology has its advantages and disadvantages, sometimes it is a best medium for teaching-learning process. When face-to-face learning is not possible, we have the option to use online learning. While talking about value, technology is also not left behind. Value from ancient period is a main component to be included in learning. Values are the principles, belief, traditions, doing good and so on. Values can be many types on the basis of social, personal, cultural, environmental and the like. Values in e-learning also can be inculcate in many ways. As in the reviews of literatures showed, efficacy of e-learning for value inculcation depends on different suitable methods, models and approaches of teaching i.e., by distinct between instrumental and intrinsic value, presence of social and cognitive in online learning, using a new pattern to introduce content, training of individual, involvement of parents and member of the society, re-use of the course and different others value-added model. Through e-learning the values like, motivation, confidence, responsibility, self-efficacy, collaboration etc. can be enhanced. So, e-learning has the efficacy to inculcate value by following some rules and principles. It can be an effective means for value inculcation. But till yet, e-learning is not capable of taken the place of face-to-face mode learning completely, as researchers found many disadvantages in it. Many researchers support that it is a challenge and it will be a great achievement in technology education by focusing on how to inculcate values among students.

5. FINDINGS AND RESULT :

From these reviews it can be said that, many investigators are supporter of that, e-learning is not value-free as it includes different values on it. Studies have proved and researchers also agree on that effectiveness or the efficacy of e-learning has increased in recent years. There is the need of proper implementation of it. Investigators proved effectiveness or the efficacy of e-learning in multiple ways. For more improvement in effectiveness of e-learning, as suggested by many researchers, it needs to implement different design, methods and models of value, teaching and learning in it. But from these reviews researcher come to know that value inculcation through e-learning is a serious task which need to be stressed in educational system of India.

By analyzing all the reviews, it is also clear that, in India studies of value inculcation through online teaching not considered by many. Therefore, this area of study should be given importance in India also. As value is an important part in Indian system of education, mentioned by many committees and commissions as well, it is the high time to take this seriously and do more studies on it.

6. CONCLUSION :

Technology has captured many fields already. It is in its way to captured many other fields. It has a great contribution towards education system/educational field as like any other field. Technology should be constructive rather destructive. E-learning is the use of technical tools in teaching-learning process and it enables learners to study anytime and anywhere. So, e-learning is very beneficial for present days. There is the need of proper implementation of

online teaching or e-learning by applying various methods and approaches. This paper critically reviewed the literatures related to e-learning and value inculcation. As e-learning in its progress to achieve many more in the coming days; it must strengthen the values in human life. It is also will be justify to say that, despites some challenges, e-learning has made a great and strong impact on education.

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