

Invigoration of e-learning in Education: Challenges and Opportunities

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ABSTRACT

Nowadays, technology is literally everywhere and utilizing technology in every corner of life is common. With the use of technology, anyone can quickly acquire information and share their knowledge with others. This paper aims to examine the current Invigoration of e-learning in education, and identify the challenges and opportunities it presents and suggest ways to enhance its effectiveness. The work is based on secondary data including different studies and reports on e-learning in education. Using academic search engines like Google scholar, Research gate, JSTOR, Academia and EduPedia, the relevant articles and studies were downloaded and reviewed. The Use of internet in the teaching learning process an emerging concept of e-learning made learners to access knowledge and strengthened new aspirations in learning. It changed the modes of learning strategies, developed creative aptitude, attitude and acceleration as per one's own pace and learning interests. In the whole education system this e-learning concept had broadened the horizons of new and innovative means to provide educational opportunities to people across all age groups. The results of the study highlighted that e-learning provide more freedom, flexibility and collaboration. Moreover, it cuts across geographical, time and space barriers which made it more fruitful and easy for learners to acquire knowledge. After reviewing the previous studies, the researcher opines that e-learning in modern days had really enriched the quality of teaching and learning, and had to a greater extent provided an impetus to learners to access all types of knowledge. Furthermore, amid Covid-19 time's students and teachers perception changed regarding traditional built classroom space as being the sole conducive learning space which Invigorate e-learning.

Keywords: *Technology, Invigoration, E-learning, SWOT analysis.*

Due to the rapid growth of information and communication technology, the letter "e" has become the symbol of this most recent era of information technology. The letter "e" is used as an abbreviation for electronics. As a result, words beginning with "e" are now appearing in almost every other field, including e-learning, e-health, e-business, e-government, e-commerce and many others. In today's world, where globalization,

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networking and information technology have reached their heights, e-learning plays an important role in education. E-learning is the process of learning that is enabled and assisted by information and communication technologies (ICT) to allow people to learn at any time and from any location. It revolutionizes the way we educate and learn in general. E-learning has the ability to help every learner reach his or her full potential while also assisting in the development of a flexible educational workforce. It paves the way for a truly ambitious educational system in the future learning society. According to Ally, “e-learning plays a significant role in any nation in the educational growth and it offers opportunities to develop nations in order to enhance their educational development”. Furthermore, it assists the new generation of teachers to enhance and update their skills for pedagogies of learning of the existing teaching force to the 21st-century tools. (Behera, 2013), It was also noted that technological innovation, namely the Internet, is no limited to the four walls of classrooms and embraces all types of technologically assisted learning and teaching. E-learning is characterized as learning by making use of digital equipments, such as desktop/laptop computers, Smartphone’s, CD/DVD players, and so on, which originally arose as a competitor to traditional face-to-face learning in the 1980s. (Abuhamdeh, 2010; Wains and Mahmood, 2008). “With the growth and improvement of e-learning is accredited to advantages such as manpower, cost, flexibility and convenience (Ozkan and Koseler, 2009)”. To promote e-learning, the Indian government has recommended a variety of e-learning programs, as well as various tools and technology.

Significance of the study

Educational technology occupies a significant place in the process of teaching and learning. Its goal is to increase the efficiency and enrich the teaching and learning process. Both the student and the teacher will benefit from it in terms of knowledge, attitude, skills and values. Technology continues to move forward and impacted the educational system to a great extent. In order to use the internet in the teaching learning process a concept emerged as e-Learning, which helps the learner to access knowledge anytime and anywhere. With the support of e-learning, students can organize the information they need and study whenever it is convenient for them? Nevertheless, e-learning spaces provide more freedom, flexibility, and collaboration (Wani et al., 2022). Furthermore, network-based e-learning platforms actively encourage knowledge sharing and individual information accumulation, which can increase learning efficiency, support knowledge innovation and ultimately boost individual and group core competitiveness. Nowadays, technology is a weapon which is beneficial to remove geographical barriers and provide access to everybody to learn anytime and anywhere. The main goal of e-learning is to invigorate accessibility of education and improving student’s academic progress.

Objectives

1. To examine the current status of e-learning in education.
2. To identify the challenges and opportunities of e-learning in education.

METHODOLOGY

The data were collected through the secondary sources like peer-reviewed articles, Magazines, conference proceedings and books. The data was analyzed by using qualitative methods such as content analysis and thematic analysis.

Data Collection

The data collection process consists of searching for relevant articles and studies using academic search engines such as Google Scholar, ResearchGate, JSTOR, and EduPedia. The

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search terms include e-learning in education, challenges of e-learning, opportunities of e-learning and “role of Technology”.

Data Analysis

The collected data was analyzed to identify common themes and trends in the use of e-learning in education. The studies were screened based on inclusion and exclusion criteria, such as publication year, language, and study design. The themes were then grouped into categories such as Strength, Weakness, challenges, opportunities and best practices. The analysis was further done to identify gaps in the literature and areas where further research is needed.

Invigoration of e-learning in Education

The inclusion of e-learning into the educational system will enable pupils in increasing their self-confidence and motivation (Nawaz and Qureshi, 2010). E-Learning offers the learner important possibilities and advantages like flexibility, accessibility, and convenience are the three key benefits of online learning. Learners can learn according to their own rate through e-learning (Obringer 2009). E-learning has been used very efficiently in university teaching to enhance the conventional methods of administration and lecturing. They now have personalized web environments where they can join discussion forums with their class or group, and this new type of access gives them a more flexibility in their study methods. Students taking many courses at many universities can now find that they have web access to the course materials and some digital resources to support their learning (Torbjorn Pitkanen, 2012). A web-based technique called e-learning facilitates teaching and learning using a computer and the internet. It removes the gap between an educator and a pupil who are in two distinct places (Wani Hilal, 2013). E-learning is vital for developing the next generation of educators and improving the abilities of the current teaching workforce to employ pedagogies and tools from the twenty-first century. Thus, the trend in education is changing. Education is no longer restricted to the classroom's four walls due to current technologies, particularly the internet (2013, Behera Kumar). As a result, both educators and students have benefited from the usage of e-learning in education. It frees them from the restrictions of time and place constraints and offers digital communication so that students are free to use and access educational resources and materials whenever and wherever they are (Sun, Tsai, Finger, Chen and Downing, 2008; Huang, 2010). E-learning is essential to the advancement of education. It is envisaged that the e-learning issue will benefit the growth of the educational sector if India and emerging countries move forward as a joint venture and cooperate on it (Randhir and Gaikwad, 2015). E-learning is therefore a powerful tool that improves knowledge transfer and educational quality through the use of quickly replenishing global educational resources, the expansion of the educational services provided by universities, and the improvement of the attractiveness of the studied material by altering the educational sector. It makes it easier for students to work independently and at their own pace, enables operational evaluation of the acquired knowledge, and improves their levels of self-motivation, responsibility and self-discipline (Truntyagin et al. 2016). Nowadays, the dominant educational system, particularly among young people, is e-learning, which encourages students to complete their work independently. E-learning provides students with access to the global world for study purposes as well as temporal flexibility for their learning (Salamat et al, 2018). Digital tools are used in e-learning for both teaching and learning. It makes use of technological techniques to let students study regardless of their location and whenever they need. It involves instruction, knowledge dissemination, and encourages dialogue among students as well as the sharing and respect of opposing viewpoints. It facilitates communication and strengthens the bonds that support

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learning (2019, Shehu Talatu and Aminu Bashir). E-Learning has been an accelerated transformation in learning strategies with varied trends (Zain, 2020) and recommended at all the levels in the best way possible for the learners to focus and carry on with their learning activities virtually and more spontaneously and without major hindrance. E-learning has unquestionably established roots in the educational sector. Opportunities for multimedia instruction have increased as internet connection speeds have accelerated. Additionally, other social media platforms are also having a significant impact on education (Chaturvedi and Saxena, 2022). Recent studies have demonstrated the beneficial association between motivation and achievement. Students' motivation for learning, involvement and attention are all increased through e-learning (Hamad et al, 2022).

SWOT analysis of e-learning

The term SWOT stands for Strength, Weakness, Opportunities and Threats. In this context, we highlighted the strengths, weakness, opportunities and threats of e-learning on the basis of advanced literature review.

Strengths or Advantages of e-learning:

E-learning offers a lot of freedom, flexibility and collaboration. It offers the advantage of allowing students to attend class at any time and from any location. When and where education is required, it is available. E-learning can be incorporated into a learner's busy schedule, even if they have a job, they can use e-learning to supplement their education. This option is also available if the learner needs to do the learning at night. With the help of e-learning students can locate the material that is relevant to their specific circumstances and interests. Students can choose learning resources based on their level of expertise, interests and what they need to know to perform better in a given activity using e-learning. E-learning is more focused on the learner and it is more engaging for the learner because they are studying things that they are interested in. E-learning is adaptable and can be tailored to match the needs of individual students. It enhances student in gaining an understanding of the Internet. Students are encouraged to take personal responsibility for their learning through e-learning. When students succeed, they gain self-awareness and self-confidence. E-learning helps us to reach the unreached without any boundaries. Because it is a boon to society it can reach any part of the world and maximum benefits can be obtained from it by anyone and at anytime. The use of e-Learning programs improves the cognitive and psychomotor abilities of learners (Kiboss, 2000; Wekesa, 2003). Zarabian et al., (2010) found that e-Learning enriches the learners' understanding and problem-solving abilities. Teacher's can present their material in a variety of ways to accommodate different learning styles. For example, students who wish to consider "hearing" and "viewing" will benefit from an instructor posting both talking notes and slides on the internet (Pujari and Kalet, 2021). Furthermore, it was found amid Covid-19 time's students and teachers perception changed regarding traditional built classroom space as being the sole conducive learning space which Invigorate e-learning (Wani et al., 2022).

Weakness or Limitations of e-learning:

Abdullah and Toycan (2018) has mentioned that developing countries have faced difficulties in adopting e-learning technology due to professional and student resistance, as well as a lack of suitable facilitating conditions. E-learning may be erroneous at times and may not be confirmed scientifically which leads to misperception and learning as challenging one (Pattanwala and Siranjeevi, 2020). Feedback may be inappropriate since they are unaware how the student took the assessment. The technological service provided by e-learning is irreconcilable with psychological factor persist in the learning process. It is not necessary

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that all the learning content and methods need to be effective and efficient (Clark and Mayer, 2008, 2011). The main weakness of e-Learning is deficiency of basic facilities for e-Learning. Many developing countries lack the basic infrastructure for e-Learning like computers, electricity and high-speed internet connection. Kumar, et al. (2012), found that the main reason for stress among majority of students using e-Learning was poor access to e-Learning technology at institution and home. It is ineffective in rural areas where Internet access is limited because it is solely focused on the Internet, and it is not appropriate for technical subjects such as mathematics and operational research (Butola Lata, 2021).

Opportunities of e-learning:

The integration of e-learning into education can catalyze the shift toward applying adult learning theory, where educators will no longer serve mainly as the distributor of content, but will become more involved as facilitators of learning and assessors of competency. The lectures are available to students at any time. They may repeat the same lecture multiple times which allows students to better recall the information which is not available in traditional form of education (Manocha and Sharma, 2021). Open-source digital learning solutions and learning management software should be adopted, so teachers are encouraged to conduct teaching online. DIKSHA (Digital Infrastructure for Knowledge sharing) platform reaches throughout all regions of India, can be further to ensure proximity to student learning (Prasad et.al, 2021). E-learning not only save time but also provide opportunity for work-life balance. It provides opportunity to pursue higher studies in spite of commitment which includes family, employment, etc. it helps to find new opportunity in the stream the employee is working with the help of online education (Bjorkand Ottossonand 2008). E-learning appeals to students because it fits a variety of learning styles. Students have the benefit of being able to learn at their own pace. Students can also learn by participating in a number of activities that cater to a variety of learning styles. E-learning is extremely beneficial to both educators and businesses. Learners appreciate being able to learn at their own pace, on their own time and at a lower cost. Azeiteiro, et al. (2015) contended that e-Learning in higher education can be important for full-time employees who want to receive life-long learning.

Threats of e-learning:

The lack of technological penetration in rural areas is the main hurdle for e-learning in India. Because the majority of our population (65.53%) lives in rural regions, this is a severe problem that must be addressed. Main threats to e-learning include lack of student oversight, poor and cheaper connectivity, insufficient infrastructure, and several other technological issues. (Liebowitz and Frank, 2011). The replacement of teachers and the conversion of traditional learning methods to electronic learning may have psychological consequences. It includes resistance to change, aversion to adopting technology, a lack of confidence, fear of the unknown, a lack of control, the cost of implementation, and tutor training. (Arabasz et al., 2003, Ozuorcun and Tabak, 2012). While evaluating the progress of the individual and getting feedback will be harder or even negligible (Sreeja and Lalitha, 2021).

CONCLUSION

To infuse the concept of e-learning with its unique approaches, education institutions must provide specific training and support and at the same time, administration must provide the necessary support and infrastructure. An effective utilization of e-learning can enhance teaching learning process and ensure learning outcomes of education system in India.

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The importance of e-learning has been recognized at all levels of decision-making in the Covid-19 period. During the lockdown, schools, colleges and universities are inventing methods and procedures to communicate with students. With the phrase "Let COVID-19 not Stop Your Learning," the Ministry of Human Resource Development (MHRD) constantly emphasizes e-learning. "Keep on with SWAYAM." E-learning benefits a huge number of students and it is likely to become a more effective and efficient way of teaching-learning in the future.

E-Learning is certainly transforming education not only at a national level but on a global level. Countries are increasingly partnering on and communicating through e-learning projects in order to provide their students with the greatest available learning tools while also bridging cultural gaps.

In recent years, several online learning platforms have sprung up to make studying easier, simpler and more convenient. We already have over 560 million internet users in the country and this number is rapidly increasing. It means that the online world has become more accessible to a large portion of our society and we must take advantage of this development. E-learning has the potential to encourage teachers, parents and students to become innovative, imaginative and creative.

Appropriate e-learning platforms like SWAYAM, DIKSHA, are going to be extended to supply teachers with a structured, user-friendly, rich set of assistive tools for monitoring progress of learners. According to National Education Policy (NEP 2020) lays strong emphasis on extensive use of modern technology in order to make teaching learning process effective and productive.

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Conflict of Interest

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