

The Evolution and Advancements of Online Education in the Indian Context

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Abstract: *It has been shown that, like other economic sectors, the education sector has changed with time. More progress and change has occurred in the education sector than in any other. Projectors and LEDs were added subsequently to classroom teaching, which replaced the Guru-Shishya Parampara educational system. These days, Web-Based E-Learning (WBEL) portals and online education are commonplace. Recent years have shown that online education, or e-learning, has emerged as a strong contender for the position of the educational system of the future. It has been found that millions of people worldwide have been instructed on a range of disciplines via a number of recent online courses. Notwithstanding language and cultural disparities as well as a diverse populace, e-learning has gained traction in India as a result of rising purchasing power and affordability. The only things propelling the e-learning system's growth are noteworthy developments in information technology and technology. This essay's objective was to investigate how Web Based E-Learning (WBEL), or e-learning, has affected the modern Indian educational system.*

Keywords: Online Education, E-Learning

I. INTRODUCTION

India is a sizable country with a varied population, linguistic and cultural traditions, and an extensive educational system. We provide a variety of schools, including those that follow the Gurukul approach and those with first-rate infrastructure. While some schools run in-house initiatives to support children's overall and physical development, some students still face obstacles in obtaining basic school materials like books and stationery. Many universities and other institutions send their students overseas for orientation or study as a result of international cooperation. The quality of education delivered varies significantly depending on a number of variables, including socioeconomic background, poverty, differences in living conditions, and the lack of teacher training programs. Within the international education sector, India has one of the largest and most well-established educational systems in the world. There are 10,30,996 schools in all in India; 1,77,812 of them are located in rural regions, while 8,53,184 are located in urban areas. As of March 31, 2019, India has 907 universities, 399 of which were state universities, 126 of which were officially recognized as universities, 48 of which were central institutions, and 334 of which were private universities. The number of schools, colleges, and universities notwithstanding, the educational system is still expanding and changing. Nevertheless, there is a lot of unrealized potential in the Indian educational system. At a compound annual growth rate of around 20% over the next five years, the online education sector is projected to be valued at USD 18 billion by 2022.

Online learning, often known as WBEL, is a paperless, information-and technology-driven educational system. It blends educational services with technology. It is the study of academic material outside of the traditional classroom via the use of electronic technology. We know that technology is a game-changer and has almost taken over every area of our life.

Background of The Research Study:

Given the abundance of knowledge available on the Internet, it is advantageous for students to have access to this enormous knowledge base. The only delivery methods that can make this possible are information technology (IT) and

the World Wide Web (WWW). E-learning portals have the benefit of being flexible in terms of use time, place, and medium. In a country like India, where societal and economic barriers prevent people from accessing basic or higher education, online education platforms allow people to have access to excellent educational materials. Since that India is the second most populated country in the world, online education and e-learning are essential. To accommodate demand, many WBEL systems and e-learning platforms are located throughout India. E-learning is a new trend in education, so bid adieu to textbooks, teachers, and classrooms. There are two stages to e-learning. The first level is the educator level, and the second is the trainer level. Elementary and higher education are included in the first stage of education, whereas corporations and organizations use the second stage to train and develop their workforce.

These days, e-learning is not limited to educational institutions and can benefit businesses as well as companies. Businesses often utilize e-learning portals to train and develop their employees. WBEL proves to be a game-changer in India, where a number of obstacles to education exist, including population density, socioeconomic level, and the student-teacher ratio. Web-based e-learning portals are expected to expand more faster since they can be accessed by ordinary electronic devices including computers, smartphones, tablets, and mobile phones. WBEL provides live interactive classes, recorded videos, and a variety of modules tailored to the requirements of both students and businesses. WBEL participants may interact with other students online, ask any questions they may have, and get answers all online. In this research study, the terms web-based e-learning (WBEL), e-learning, online learning, and web portal have all been used interchangeably.

II. RESEARCH METHODOLOGY

The foundation of this inquiry is secondary data. The previously stated secondary data comes from a range of sources, such as web portals, online education, e-learning reference books, and distant learning.

A range of publications and journals pertaining to web portals, e-learning, distant learning, and online education are other sources of secondary data for this research project.

In addition, various websites, search engines, and online information sources are used to collect secondary data for the aforementioned research study.

2.1 Objectives:

The objective of E-Learning differs from person to person. These objective may be general or specific. General objective are common for every person but specific business vary from one person to other. Some of the most commonly objectives of this research paper are as follows:

- To study the meaning and concept of E-Learning.
- To study the different E-Learning portals in India.
- To study the impact of E-Learning in India
- To study the benefits and objectives of E-Learning
- To study the barriers, demerits and limitations of E-Learning
- To study the growth prospects and future of E-Learning in India.

2.2 Hypothesis Of The Research Study

WBEL or online learning is paper less and electronic education system with the use of information and technology. It is a combination of learning service and technology. E- Learning portals has a benefit of flexible place, time and medium of use. For the use of Web Based Learning System, we need not to have access to school and spend a lot of time and money, all we need is a good internet connection and computer system, mobile or laptop. The research study was carried out with following hypothesis in view:-

- E-Learning is very helpful for country like India which consists of large amount of youth.
- It provides better utilization of Information Technology.
- The impact of E-Learning in Indian Education System is positive.
- With the increase in the use of internet day by day, the scope of E-Learning is wide.
- There are many growth prospects of WBEL in India with some limitations

2.3 Types Of E-Learning Models:

There are basically 3 types of E-Learning i.e. Synchronous, Asynchronous and Blended Learning.

- Synchronous means at the same time, so in Synchronous type of E-Learning, there is a interaction between participant and instructor via Web Bases Portal.
- Asynchronous means not at the same time, so in Asynchronous system of E-Learning the portal allow the participant to complete the syllabus or training without interaction with the trainer or instructor.
- Blended learning is a combination of E-Learning tool with traditional class room teaching. In Blended learning students can enjoy classroom experience with interaction with teachers and students via actual classroom. Blended E-Learning has benefits of face to face interaction with social benefits of classroom training and different teaching techniques

2.4 Some of The Different E-Learning Portals:

There are numerous E-Learning portals around the globe. Some of the famous E-Learning portals working in India are as follows:

- Indiaeducation.net
- Khan Academy
- Coursera
- EDX
- Byju's
- Meritnation
- Ask IITians
- W3 School
- Academic Earth
- Code Academy
- Open Yale Courses.
- Investoo

Indiaeducation.net:

Is the largest internet network, with over 450 domains and 45 educational websites. It's one of the largest and most widespread networks, with portals from 28 states, 6 union territories, and 4 major Indian cities. This website essentially aims to educate users of all ability levels. Among the fields of operation are higher education, school education, and remote learning.

Khan Academy:

Established as a charity, Khan Academy provides all students with excellent training across a variety of subjects. Its lectures are formatted as short English videos and are accessible in 36 different languages. To offer specialist programming, they worked with the California Academy of Science, MIT, NASA, and the Museum of Modern Art. It started off as a one-man seminar and now employs 150 people.

Coursera

Professionals from prominent universities and companies instruct each course on Coursera, guaranteeing that learners may pick up new skills whenever and wherever they choose. Hundreds of free courses and videos are available at this site. Coursera provides 4116 courses via 207 partners in 52 countries. More than 190 notable academic institutions and corporations, including Google, IBM, Stanford University, Duke University, and Imperial College London, are partners with it.

EDX

Founded by Harvard and MIT, EDX is home to more than 20 million students and provides them with access to prestigious educational institutions, companies, and schools. By eliminating barriers associated with cost, location, and ease of access, it provides education of superior quality. More than 120 establishments are involved as partners. It offers over 2400 courses to a diverse global user base. Harvard University, Boston University, Australian National University, and The University of Queensland are among the original members of EDX.

BYJU's

Originally founded in 2011 as Think and Learn Pvt Ltd. The main objective during the foundation stage is to assemble a strong team of experts in media, content, and technology in order to provide top-notch educational resources. In 2015, BYJU began accepting applications from students in grades 6 through 12. In 2016, the Chan-Zuckerberg Initiative (CZI) awarded money to this Asian firm for the first time.

Meritnation:

Meritnation is India's largest online learning network, with millions of users from nine different countries. It provides services at several of India's major boards to students in grades I through XII. Meritnation is aware that every student has different requirements based on their academic background, preferred method of learning, and areas of interest. Meritnation was named the best educational website in 2015. After two years, the top 5 Android applications for CBSE students were given merit.

2.5 Advantages Of E-Learning:

Among the numerous advantages of e-learning, one of the biggest is that users may use the portal at any time that works for them. It is also available via any browser on all platforms and devices. E-learning portals and services are popular among professionals and youth because they provide flexibility with regard to time and place. One of the main advantages is that current information is available from anywhere in the world because of the internet. Even from the most remote locations on Earth, users may access and study the most latest course materials thanks to e-learning portals. It has various advantages for working professionals because of its flexible learning environment. There are now several certification courses easily available that were previously unachievable without traveling.

2.6 Disadvantages of E-Learning :

E-learning offers many advantages, but it also has certain disadvantages, one of which is a poor Internet connection. In a country like India, internet connection is geographically limited. Not only are there many remote areas in India without internet connection, but there are also a great deal of places with slow or erratic connectivity. Slow upload and download rates, bad connections, and poor audio and video quality are some of the primary problems with Indian e-learning services. The absence of teacher-student interaction on e-learning portals is one of its main disadvantages because of its static nature. Furthermore, many are reluctant to move from traditional to online learning techniques. It is difficult to convince end users to give up their access to e-learning, therefore e-learning portals and providers have a difficult time reaching them. Not every topic or course will be offered via an online portal since others need more specialized attention and interaction. Online courses are often out of date since many of them were developed more than 10 years ago and required to be updated frequently to reflect changing environmental circumstances. It sometimes need improvement.

2.7 Current State of E-Learning In India:

Online learning has grown as a result of new technologies, quicker internet, startup businesses, and the widespread use of cellphones. Additionally, the Indian government is putting in great effort to make online education accessible to students across the country. Government initiatives are supported by low-cost mobile phones, easily accessible SIM cards, and affordable internet plans. In India, there are now online courses accessible for every skill level, from basic to advanced. A plethora of e-learning services are offered by several training centers and new enterprises. Numerous service providers provide study materials and video courses. However, a lot of people place a strong emphasis on convenience-based training and learning platforms that allow students to attend courses from anywhere at any time. Another reason fueling the growth of e-learning in India is the need to stay current on knowledge and abilities. A ten-year software professional, for example, has to brush up on topics like programming languages, cloud computing, and data analytics. To get better working conditions, promotions, and pay rises, people must keep up with current developments in their fields of expertise and understanding. Only with the use of e-learning resources is this possible.

The e-learning and online learning sectors are already the focus of a large number of Indian start-ups. Many companies, like Learn Social, Simplilearn, and Intellipaat, are aggregators that provide mid-level employees access to online learning resources. Simplilearn is a Bengaluru-based start-up that now offers close to 200 certification courses in

several fields, including information technology, project management, financial management, and quality management. The company has trained more than 2,25,000 workers globally.

According to Intellipaat CEO Diwakar Chittora, the company has expanded by over 1000% since it started operating in 2011. Over 80 technology courses and online IT training, including corporate training, are provided globally by Intellipaat. Learnsocial, a six-year-old firm located in Hyderabad, is creating an aggregator model. The company aspires to be the Amazon of online learning. The firm targets mid-level professionals and students. Over 200,000 users and 1,500 learners, according to the company's developer Raju Vanapala, have benefited from its instruction.

2.8 Challenges Faced By E-Learning In India:

The Indian government has kindly provided funding and support over the last 50 years to create the best educational system in the world. To do this, the government must overcome a number of challenges. The inability to maintain good educational standards, the slow rate of technology and intellectual growth, a lack of public awareness, and stringent bureaucracy are some of the obstacles preventing the development of e-learning. The expansion of India's e-learning system is severely hampered by poor infrastructure, erratic internet connectivity, and the need to raise awareness among the country's rural residents. The main challenges that e-learning providers face include variations in literacy, gender, culture, and religion. Despite being necessary, certain course topics may not always be seen favorably by all societal groups because of variations in spirituality or religion. Significant problems arise from geographic variances, especially when it comes to time zone discrepancies during in-person sessions.

2.9 Future of E-Learning In India:

India is one of the major global players in the e-learning industry. Because of its strong educational infrastructure and large pool of highly trained training professionals, India is the world's leading provider of e-learning. Given that India is now dominating the IT sector, e-learning portals seem to have a bright future. The Indian government is working tirelessly to enhance the nation's e-learning infrastructure via policies and financial support. Many stakeholders in the business sector are working hard to expedite India's e-learning system in addition to the government. All of these initiatives are making India a more appealing place for the e-learning industry. Many foreign corporations are interested in setting up shop in India to sell e-learning systems.

The future of open universities in India seems quite bright. There are now around 10 open universities in India that provide more than five hundred courses. Indira Gandhi National Open University (IGNOU) is India's biggest and most cutting-edge open university. The goal of the Distance Education Council's establishment was to promote and expand distance learning across India. Distance education is becoming more and more popular in India since it is 50% less expensive and may provide better, higher-quality education without needing students to leave their homes or places of work. The government and commercial network service providers have launched many measures, including as expanding bandwidth, constructing networks and towers, and providing affordable internet, to broaden the reach of e-learning services in India. Given the increase in mobile phone users and younger awareness, we may assume that e-learning services have a very bright future in India.

III. CONCLUSION

In conclusion, the impact and development of online education, commonly referred to as e-learning, in India have undergone significant transformations, especially in recent years. The widespread adoption of digital technologies and the growing accessibility of the internet have facilitated the expansion of online education across various academic domains. The positive impact of e-learning is evident in its ability to overcome geographical barriers, providing educational opportunities to a diverse and widespread population. Moreover, the flexibility and convenience offered by online education contribute to the democratization of learning, allowing individuals to pursue education at their own pace and convenience. However, challenges such as the digital divide, the need for reliable internet connectivity, and the adaptation of traditional pedagogical methods to online formats persist. The ongoing development of e-learning platforms, increased investment in digital infrastructure, and evolving pedagogical approaches signify a continuous commitment towards enhancing the quality and accessibility of online education in India. As the nation strives for

educational inclusivity and technological advancement, the impact and development of e-learning are poised to play a pivotal role in shaping the future of education in the country.

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