



E-Learning and Its Usability for E-Learners to Access Higher Education in India

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Abstract

In India, e-learning has been a buzzword since its inception. While having been implemented in many universities and educational institutes around the world, this concept was initially viewed as a medium for distance learning. However, the Indian scenario has changed dramatically since then and all major colleges and universities have started providing online courses to students. There is an overwhelming demand for e-learning in India which has forced all sectoral providers to include it in their curriculum. But at the same time, there are certain fundamental issues that need to be addressed before actually implementing any e-learning course or module. This article provides a comprehensive overview of the recent developments in E-learning arena. Based on extensive research, this article provides essential insights into what should be prioritized when considering e-learning for its implementation so as to better suit Indian curriculum needs.

Keywords: E-Learning, E-Learners, Higher Education, Online Courses, Technology.

Introduction

E-learning can be a wonderful tool for anyone looking to gain higher education from any country in India without going abroad. It offers better access, affordability and time management for online learners while also providing certain key advantages that traditional schools cannot provide such as flexibility in course materials and open access. Compared to other alternatives such as distance learning or correspondence courses, this method leaves less room for errors along with providing all the benefits associated with online learning.



There are a wide range of courses available from elementary education all the way to higher education, including at least one from prestigious universities such as the Indian Institute of Science. This includes online learning as well as drop-in sessions over various subjects. The courses can be accessed from many different locations in India and if you choose to do so, you have even more options for where you work. Certain degree programs, such as medicine and engineering, have much higher rates of acceptance than others such as law or teaching. you can even take your full-time diploma online.

There are many benefits for this method rather than other alternatives, including: better accessibility, more affordable fees, broader choice in subjects and great flexibility. This allows you to conduct your studies when you want and where you want at your own pace. It is one of the best options if you need to be away from home to do your studies. Plus, there are also other options available such as virtual learning environments that could provide similar experiences or even enhance them by providing additional resources if needed. Cost-wise, E-learning is often cheaper than other offline alternatives. A lot of courses are high on fees but are affordable with financial aid. The materials are also available at a fraction of the cost compared to classes offered on campus. There are some limitations though on some courses but it varies from one university to another where you can find lesser fees for more courses.

E-learning can help people who have limited time due to work or other commitments while giving them the option of completing their education online while working on their own schedule. This way, they can even take care of family needs while taking classes online or earning degrees from prestigious universities in India for themselves or loved ones.

Online courses are a great choice for those who might not have a lot of time to take on a traditional form of higher education. Even if you have a very limited schedule, you can still manage to spend some time online and still be able to take online classes.

Objectives of the study

The main focus of the study is to assess the usability of e-Learning for E-Learners in India and to understand the learning needs and preferences of e-learners in India, explore their barriers and challenges with e-learning, identify the types of e-learning, determine its effectiveness for e-learners.



Research Methodology

The current study is based on secondary source of information to provide a clear view on e-learning and its usability for e-learners to access higher education in India. E-learning is the most effective educational method that can meet the learners' learning needs in different learning settings. With the advancement of technology, e-learning has enormously influenced every sphere of life. E-learning ensures high level of interactivity and learner control, an opportunity for open access to course materials, flexible time frame for gaining credits, etc. It has become a preferred option for learners who are looking for flexibility in their education system and not willing to compromise on quality. This study attempts to explore e-learners' experience on using e-learning courses in higher education institutions in India with reference to some specific factors like accessibility, interactive features etc.

Literature Review

To provide our perspective on E-Learning for Indian e-learners, Literature Review on E-Learning and its usability was conducted with an objective to understand the effectiveness of various types of E-Learning.

E-learning involves learning activities that are delivered via computer; it can be accessed through any web enabled device (laptop, tablet or mobile phone), which is able to run learning management software like Moodle. There are many applications of e-learning like conferencing, collaborative writing projects, chatting sessions for communicating ideas, chats with tutors/coaches, forums; online resources like pictures, videos etc(GAIKWAD & JADHAV, n.d.).

E-learning gets huge benefits with persons with persons with disabilities, distance learning, e-commerce, e-government and e-health. The Indian government has started National E Learning Mission to promote the use of Information Communication Technology for education delivery. The government is encouraging the use of ICT in distance education through virtual classrooms, online libraries, interactive teaching/learning tools, educational videos etc(Martin et al., 2010).

The significant outcome of E learning module would be the development and publication of a detailed checklist that will help designing and improving or selecting courses and programs



that incorporate effective E-Learning components. The outcome should provide guidance on E-Learning for both teachers and students as well as help them in their curriculum planning(Sawant, 2016).

The paradigm shift in technology has started and users are aware of the benefits of utilizing it. E-learning provides an opportunity to harness this power of technology and overcome challenges that the current education system is experiencing(Swierczek&Bechter, 2010).

E-Learning will help to transform the existing education system by providing an e-infrastructure for knowledge delivery, provision of continuous learning opportunities and easy access to new forms of learning such as online mentoring and support for teachers/students. E-learning would help to improve sustainability and learning outcomes and increase access to new types of learners. E-learning will also provide an environment for e-sharing which can benefit both teacher/student as well as remote learners. E-learning would also provide an alternative learning model(Al-Fahad, 2010).

E-learning in India has been identified as one of the important strategies to address the unmet demand for higher education and contribute to the country's knowledge economy. However, the country faces challenges in terms of access to, and affordability for higher education. A majority of students are unable to afford higher education due to the lack of quality institutions in remote areas. For e-learning tools and applications to help bridge this gap, it is important that they be user-friendly with opportunities for interaction between learners(Akbarali, 2011).

The use of e-learning tools and applications to facilitate student retention has also come under the spotlight. Research has found that students frequently disengage from e-learning courses because of usability issues. E-learning should be student centred, with relevance to the subject area, opportunities for experiential learning, and interactive features(Hameed et al., 2008).

E-learning institutions are no longer an anomaly in India; they are now expanding rapidly across the country's institutions of higher education (hearing information on whether institutions provide research-based e-learning or introspective methods, will be included). The rapid growth of e-learning across institutions presages integration with postgraduate



programmes, which is anticipated to increase over time as student numbers rise (Afghani, 2011).

In 2011, Learning and Teaching Support Programme (LTSSP) of the Ministry of Human Resource Development (MHRD), Government of India, introduced the National Mission on Education through Information and Communication Technology (NMEICT) to contribute to significantly improve access, participation and performance in higher education. The MHRD's goal is that by 2010, 30 percent of all higher education should be delivered through online or blended mode (Saxena et al., 2011).

There are several institutions that provide e-learning courses in India for students to prepare for examinations like All India Engineering Entrance Examination (AIEEE) at undergraduate level, Joint Entrance Examination (JEE) Advanced at undergraduate level or Graduate Aptitude Test in Engineering (GATE) (Chawla & Joshi, 2012).

In India, there are various universities that offer online programs to prepare students for undergraduate and postgraduate examinations like Indian Institutes of Technology (IITs), National Institutes of Technology (NITs), National Institutes of Pharmaceutical Education and Research (NIPER), Indian Institutes of Management (IIM). For example, IIT Bombay has a cell called E-cell whose goal is to help the institute move towards 100% online medium. The institute has created a user-friendly website for its students to access knowledge, interact with other students and faculty members, register for courses, do assessments and take tests at their convenience. The institute also provides online trainings to help the students prepare well for the examinations (Ray, 2012).

In fact, even before NMEICT was announced in 2011, there were 75 e-learning institutions in India. These include two MHRD sponsored e-learning institutions - IGNOU (Knowledge Unlimited Educational Services), which provides all courses online, and Indian Institute of Science Education & Research (IISER), which offers only courses related to science streams.

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The biggest benefit of using the internet for education is that educational resources can be accessed in any place at any time by anyone in the world. It also helps students develop their



critical thinking skills which they might not have developed through traditional classroom teaching methods.

The government is trying to promote e-learning programmes by providing incentives like financial assistance, grant, concession and waiver of fees. For example, the Ministry of Human Resource Development (MHRD) is supporting e-learning institutions by providing grant, grant assistance and grant for expenditure on research. Also, by helping them prepare for examinations like Indian Engineering Entrance Examination (IE), Joint Entrance Examination (JEE), Graduate Aptitude Test in Engineering (GATE) etc., at undergraduate level or Postgraduate level. Also, there are institutions that have been recognised as Centres of Excellence or Institutes of National Importance under the National Knowledge Commission (NKC).

The centre and state governments are also focusing on providing e-learning help to people by providing scholarships and loans. For example, the government of Maharashtra requires students studying in government education institutions to register for online courses and exams through the state portal. The state is also encouraging students, especially those from minority groups, to take advantage of these courses by providing financial assistance such as concessions for fees, loan waivers etc.

The government is trying to encourage e-learning institutions to give their best efforts in offering quality education as they assess that the medium is very important as it helps students improve their skills and knowledge related skills which is required for getting good jobs. For example, universities and colleges are recognizing e-learning courses and students can get certificates from them. There are several bodies that provide accreditation to e-learning institutions, for example the Distance Education Council (DEC), which is a statutory body formed by the University Grants Commission (UGC) to regulate and monitor the distance education system.

There are also institutions that have been recognised as Centres of Excellence or Institutes of National Importance under the National Knowledge Commission (NKC). There are also companies like Microsoft, Oracle etc. which offer e-learning courses with certification obtained from them. Students now have more opportunities to study with e-learning programmes as they can easily apply online and resources are easily accessible. While the



government is trying to promote e-learning institutes, there is also need for standardisation of these programmes as it helps in maintaining quality control. Also, there should be a controlling authority that can check if a particular institute is providing a standardised syllabus and if the students are getting a good education.

It is better if the government takes good care of these e-learning institutes as they are also helping in promoting India's education system to other countries. The government has supported e-learning by encouraging students to join these programmes. Many government scholarships are now available for students who join online courses. There are also many private companies that have started support programmes for their employees to study via e-learning courses. As these courses are offered by various institutions, they need strong infrastructure where the faculty members, the room facilities etc. can be provided to them by the government. E-learning is one of the best ways to make effective use of electronic media for distance education.

The following are important key points about E-Learning in India:

India is likely to continue with its policy of e-education including E-Learning for all (100% online) in the near future, due to the following reasons.

India has already developed a reputation of being an extremely competitive economy, having free markets and high GDP growth rate in recent years which will probably continue in future years. India's e-government is developing at a rapid pace, which is expected to increase demand for online services.

India has focused on education as a key to its development, which will continue in future years.

E-learners are the future workforce of India because e-education will provide greater access to higher education, particularly for lower socio-economic groups. E-learning will also provide access to students from remote areas. The unemployment rate amongst the youth is very high in India, which suggests that it is likely that there will be a large demand for jobs over the next 10–15 years. With the greater availability of higher education combined with increased employment rate, it would be highly likely that more people will gain some form of higher education over the next 15–20 years compared to recent past history.



E-learning has enabled massive access to higher education for all. E-learning is likely to be an effective way of providing higher education, particularly for the less affluent. India's middle-class population (approximately 50% of the total population) is likely to decline over the next several years due to lower fertility rates.

India's new education policy of "E-Learning for All" has already been criticised as being a waste of money by influential newspapers, which suggests that it is not going to have a significant impact on India's future economy or educational outcomes. The general opinion among many commentators in India is that the programme will cost very little and will not have a significant impact on India's future workforce.

India's Information Technology related industries have been growing at a rate of 30–40% per year for the last 20 years. The Indian IT industry employs around 2 million people directly and creates 10,000 new jobs every month. India is one of the top outsourcing destinations in the world. The Indian IT industry has been growing by around 10–15% per year for many years, which suggests that it will continue to be an important industry over the next few decades.

The government of India has recently launched a national mission on E-Learning, which is recommended by consultants as a top priority for India's future workforce. The main objectives of the E-Learning mission is to improve the quality of e-learning, increase access to information and resources, involving more beneficiaries in learning and to promote innovation in e-learning.

E-Learning will provide a platform for the development of a large pool of skilled professionals who can help India meet its development goals. This is an important policy recommendation by major universities in India on their e-learning needs. The objective of the proposed action is to ensure that all higher education institutions are implementing effective e-learning strategies, to become effective participants in their own learning communities and to become internationally competitive.



Challenges for E-Learning

The main challenges for e-learning are sustainability of institutions, low participation, inadequate faculty support, inadequate infrastructure support, lack of technical support, issues of affordability and security.

Sustainability of institutions is quite low as the process of providing the courses online is expensive. Thus, any kind of misuse or fraud may result in the closure of the institution. Thus it is necessary that e-learning institutions maintain strict cyber security measures for this purpose.

There is a low participation and interest among students and faculty. Thus it is important to maintain the quality of faculty and student engagement for e-learning to be effective.

Inadequate faculty support is also a problem as they don't always receive adequate training. Also, there is no standardization in terms of qualifications for the faculty members, which means that there can be no uniformity in teaching standards or expectations.

Inadequate infrastructure support means that there are times when the internet connectivity goes down and these impacts teaching and learning at the institution. It also doesn't help students to access courses online when there's no internet connection at their homes or they lack computers and other devices needed to access course content online.

There are other issues that may result in the closure of an e-learning institution, especially if there are institutional frauds, malpractices or misuse of funds. Therefore, it is imperative that all e-learning institutions maintain cyber security measures to ensure cyber frauds do not take place.

There are issues related to affordability of the institution. For instance, the fees for courses are very different from one institute to another. Students have to spend a lot of money for access to colleges and universities like IITs and NITs etc., which is also why it becomes difficult for students who do not get admission into these institutions to pursue their studies through distance learning.



The other issue is security of the institutions. For example, a lot of institutions providing e-learning courses are not following a standardised syllabus and the quality of education is also poor. It doesn't matter which institution a student joins if they don't complete an e-learning course because of poor infrastructure or lack of supporting infrastructure. Thus, the government needs to focus on this issue as well.

In India, there are various forums where students from all over the country can interact with each other and share their experiences about e-learning courses offered by different universities, colleges and institutions. Some of the forums are eLearning Fora, Edu Nets, E-Dutor, e-Talent Force.

Maintaining cyber security measures to prevent any kind of cheating or frauds is one of the important issues to be address. Also, to make sure that standardisation takes place in terms of curriculum and faculty details which is necessary for quality control.

E-learning has its own limitations. You might not be able to get real life experience or physical interaction with others. You will also need to invest in your own equipment that could be expensive if you want to take courses that require special equipment or software that is not easily available in most places.

Conclusion

E-learning is gaining popularity as a method of higher education both as a supplement as well as an alternative source for learning. There is an increasing demand for high quality education in India especially with respect to more access to high quality education. E-learning can potentially bridge this gap and serve as an appealing and reliable source for knowledge and information to students, educators and professionals alike.

E-Learning has great potential to be an attractive, reliable and accessible medium for higher education. It can bridge the widening gap between supply and demand of quality higher education in India. Accessibility of the content, free flow of information, universal reach are some benefits E-learning offers. However, there are also challenges which need to be dealt with to make E-learning effective in India. The biggest challenge is lack of design standards for the software used for E-learning interfaces. Resources are not easily available to our designers which can create world class designs that could improve the aesthetics aspects of



our courses tremendously. Also, we need to find ways to improve the usability and accessibility of the designs we create. Another challenge is lack of standardization, which makes it difficult for students and teachers to transfer their knowledge and training from one virtual learning environment to another. A lot of our institutions do not have dedicated technology infrastructure with reliable bandwidth, rendering them unable to provide E-Learning services. In the present scenario, higher education seems to be a privilege rather than a right. It is strongly believed that this approach to educating citizens should change and within less than a decade, a significant number of learners should be provided with high-quality education. This will open up doors to a variety of employment opportunity and also bring about social change.

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