

Online Instruction: A Revolutionary Phenomenon in the 21st Century Education in India

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Abstract

The world of the 21st century is dominated by digital technology. In this age of information and technology, online educational approaches are continuously expanding. Online education is becoming increasingly popular in India due to universities and colleges digitizing, internet penetration and student demand. RedSeer Consulting predicts that India's online education market (especially higher education and lifelong learning) will reach 5 billion U.S. dollars by 2025, driven by the government's focus on designing online education programs, strengthening digital infrastructure and meeting students' rising demand for upskilling.

Numerous innovative technologies and strategies transform the entire educational system. Today, online education is extremely popular and its popularity is developing rapidly day by day. This trend was further accelerated by covid-19 pandemic. Prior to the pandemic, only a handful of educational institutions around the world truly utilized offline learning techniques. According to UNESCO, when Covid-19 occurred, 98% of the global student population in 191 countries shifted from offline to online learning. Google Classrooms, Zoom, and Microsoft Teams were among the most prominent platforms that enabled this transformation.

Keyword: Education, Online Instruction, Covid-19, Educational System. Technology.

1. Introduction

Today's world is the technological world. Day by day new invention of science effects the human begins. Technology and science control the all spare of human being. The effects of technology have also seen in the field of education. Laptops, tablets and mobile phones are gaining popularity in education because of their portability and adaptability. Certain technological and organizational parameters had to be met in order for a particular gadget to be optimally utilized. Students prefer tablets over laptops connected to an interactive whiteboard due to the simplicity of sharing thanks to the tablet's integrated Wi-Fi and projector (IWB). Increasing numbers of studies indicate that interactive whiteboards enhance student learning. Researchers in the United Kingdom examined how IWBs and learning platforms might be utilized to impact change. IWBs encourage the use of ICT throughout the school, but they are not associated with transformational pedagogies or learning possibilities. teachers' digital competence and their usage of ICT in the classroom are related. Professional development activities, such as training, can have a significant

impact on the ICT usage of employees. Educators favor non-formal ways to professional development, such as blended learning and training that is applicable to actual classroom scenarios.

Students' digital abilities and comfort in utilizing these tools are positively correlated with their acquisition of technology experience. In general, new teachers lack experience using information and communication technologies (ICT) in the classroom. Typically, they are older Internet users who do not know how to use social media platforms for educational purposes. In addition, there is evidence that social media techniques can facilitate technological, pedagogical, and organizational innovation in teaching and learning, so aiding in the modernization of systems and institutions to address the challenges of the twenty-first century.

2. Concept of Online Instruction

Online instruction is education that takes place through the Internet. It is a form of distance learning. It is also known as e-learning, online education and under other names. However, online learning is just one type of distance learning, which is the umbrella term for all non-classroom-based learning that takes place over a physical distance. Numerous types of distance education, which has a lengthy history, exist today. Simply stated, online education is schooling that occurs exclusively online. E-learning is one of its many terms, with e-learning being one of the most common. However, distance learning incorporates a wide range of pedagogical models beyond the traditional classroom setting, online learning being only one example. The discipline of distance education has existed for quite some time, and it now exists in a variety of forms.

3. Traditional Instruction vs. Online Instruction

A shift is occurring in the global education sector from traditional learning to online instruction. In India, there is a growing movement towards the future trend of receiving one's education online, which has a positive outlook. In the field of education, online instruction has effectively created new dimensions both inside and outside of the academic programme. In contrast to other fields, online instruction has seen an explosion in demand as a direct result of the pandemic, demonstrating that every dark cloud has a glimmer of hope. The traditional educational system has started to become less popular in recent years due to the rise of online learning. Online education, like any other sector, has its particular challenges; however, with the help of emerging technologies and initiatives from the government, these challenges can be overcome. The main differences between traditional instruction and online instruction are briefly discussed below:

Area	Traditional Instruction	Online Instruction
Flexibility	Traditional Instruction systems adhere to a predetermined timetable that students are required to adhere to. This could pose a challenge for students who have additional responsibilities and require assistance in adhering to a fixed class schedule.	In contrast, online learning gives students more flexibility in accessing and completing coursework. Students can access content at any given time and complete assignments at their own pace if they meet course requirements.
Inspection	Assessments and evaluations conducted in person can more accurately determine	Online education makes use of quizzes, remote examinations, and other forms of evaluation. While handy, these

	students' comprehension and familiarity with traditional education.	assessments may not provide an accurate evaluation of students.
Learning Environment	Traditional education takes place in a physical classroom where students listen to lectures and talk to their teachers and classmates in person. In a normal classroom, students can go up to teachers, ask questions, and get quick answers. In addition, they can share what they know and their ideas with their classmates through group discussions.	In Online Instruction pupils need to be able to connect to a virtual world over the Internet in order to learn online. Online learning can be lonelier because students and teachers may not be able to talk to each other as much.
Social and Interpersonal Interaction	Traditional classrooms allow students to interact with teachers as well as classmates, which is beneficial in learning, and group projects and activities can help students acquire leadership and collaboration.	Students who study online may interact less. Online forums and videoconferencing are inadequate to face-to-face interactions with teachers and classmates.
Cost of Learning	Traditional instruction often incurs elevated costs as a result of the necessary physical infrastructure and resources involved.	Online instruction might require students to have a computer and a good internet connection, which can cost extra. However, online learning can potentially be more cost-effective compared to traditional schooling due to the ability of students to reduce expenses such as travel, accommodation, and food costs.
Evaluation Process	Traditional instruction commonly incorporates face-to-face examinations and evaluations, which have been found to be more efficacious in evaluating students' comprehension and mastery of the subject matter.	Online learning often encompasses various types of assessments, such as online exams, quizzes, and other evaluative measures, which can be conveniently undertaken from a remote location. Although these assessments offer convenience, their effectiveness in accurately measuring students may be limited.

4. Objective of the Study

1. To investigate the development of online education in India.
2. To find out the advantages of online education.
3. To find out the problems of online education in India.
4. To find out the recent initiative in India for promote the online education.

5. Methodology

The current work is primarily based on secondary information gathered from numerous sources such as journals, articles, books, reports, websites and so on. The qualitative analysis method was applied in this

investigation.

6. Development of Online Education in India

In India, online education begins as a form of distance education. In order to broaden the scope of higher education, policymakers recognized the imperative need for distance education more than 50 years ago. The demand for higher education increased as the number of students enrolment in elementary and secondary schools grew. In its report for 1956-1960, the University Grants Commission (UGC) suggested proposals for evening colleges, correspondence courses and the awarding of external degrees be considered. In its Third Five-Year Plan, the Planning Commission noted the need for the introduction of correspondence education in the country, having taken such a requirement into account. In light of the Planning Commission's observations, the Central Advisory Board on Education recommended the formation of an expert committee under the leadership of Dr. D.S. Kothari, the then-Chairman of the University Grants Commission, to examine the proposal to introduce correspondence courses. The expert committee suggested the establishment of correspondence courses due to their increased adaptability, economic viability and innovative methods of education delivery. As an experimental project, the committee also recommended that correspondence courses in India be administered exclusively by universities, in the first instance by the University of Delhi.

Thus, the University of Delhi's School of Correspondence Courses and Continuing Education was established in 1962. The project's success led to the establishment of correspondence course institutes (later renamed Directorates or Centre for Distance Education) in additional universities. Dr. B.R. Ambedkar Open University, India's first open university, was founded in 1982. This was followed in 1985 by the national establishment of Indira Gandhi National Open University. Under the Indira Gandhi National Open University Act of 1985, IGNOU was given responsibility for the promotion and coordination of open and distance learning (ODL), despite the fact that the University Grants Commission (UGC) is the regulatory body for higher education in India. IGNOU established the Distance Education Council (DEC) in 1991, and it became operational in 1992. with the Vice Chancellor of IGNOU serving as the chair of DEC by default.

In India, online education is expanding swiftly in the 21st century. In 2004-2005, several government agencies, including Indian Space Research Organisation (ISROU), Ministry of Human Resource Development (MHRD) and Indira Gandhi National Open University (IGNOU), attempted to implement two-way video communication, but due to insufficient technological advancements, their efforts were unsuccessful. Simultaneously, the Indian EdTech voyage began with the evolution of smart classrooms and satellite-based education, despite the concept's lack of popularity. With the passage of time and the advent of technology, India's online education sector grew substantially over time.

The Ministry of Human Resource Development (MHRD) established a committee to investigate distance education standards in India in August 2010. The committee recommended the establishment of the Distance Education Council of India (DECI) as a new regulatory body. It was also suggested that until such a body is constituted, the DEC can be transferred to the UGC. The Ministry of Human Resource Development published an order on December 29, 2012, transferring the regulatory authority over distance

education from IGNOU to UGC. In May of 2013, IGNOU dissolved the DEC and the UGC established the Distant Education Bureau (DEB) by acquiring its assets and personnel.

In 2018, the University Grants Commission (UGC) began to support models of online education. They permitted a few reputable and qualified institutions to offer a portion of their courses online. Over the course of 2019 this support increased significantly. This support ultimately contributed to assuring the quality of online programs offered by these institutions and reducing scepticism regarding their efficacy.

However, as a result of the covid-induced isolation and the persistent closure of educational institutions, the nation witnessed a surge in online education. Online education mended the wound that the pandemic left on educational institutions. The government and institutions have massively supported the online mode of education in the pandemic era in order to maintain the smooth flow of education despite social separation and to make people aware of the significance of online learning. Speaking from the perspective of students and their families, they view online education as the most viable alternative to traditional learning in a number of ways.

The pandemic acted as a catalyst for the development of online education in the past year. Today, e-learning has become more than a choice; it is a necessity. Technology and Covid-19 have been significant contributors to the growth and development of online education over the past decade. Now, queries about the scope, obstacles, and future of online education in India arise.

7. Pros of Online Education

Online education is a form of education that emerged primarily in the 19th century. This is a new type of approach in education. It originated primarily to meet the contemporary needs of the people in the field of education. As it was created to meet the needs of pupils, it has several advantages in the field of education. Some important aspects of online learning are discussed briefly below:

- **Affordable:** Online education is economical. It is comparable to a one-time investment, such as purchasing a laptop or tablet. Other than that, the cost of online courses is significantly lower than that of conventional method of teaching.
- **Convenient:** It is very convenient and adaptable not only for students but also for parents who are caring for their children. The students can study at home in comfort. Online courses are more interactive than classroom courses because each student is monitored individually. Consequently, the ability to focus on the subject is also enhanced.
- **Multitasking:** Online courses are a boon for those who abandoned their education to pursue a career. Because it is flexible, one can focus on both in studies and in their career.
- **Time Management:** Students can devote more time to their areas of interest or pastimes, as well as interact with people from across the country who share their expertise in those areas.
- **Discipline:** Students' self-discipline is enhanced through improved manners. It also promotes self-motivation, resulting in increased productivity.
- **Techno impact:** Since it is a virtual mode of instruction, even the most complex topics are simple and straightforward to comprehend. We can say that the teaching methodology has evolved in response to student demand.

- **Flexibility:** Flexibility is one of the most significant advantages of online classes. Although students have deadlines, their schedules are more flexible because they can work, conduct errands, and attend classes at the same time. Additionally, they can choose when to study, complete assignments, attend to lectures, etc. In addition, students can access the course at any time and complete the assignments at their own tempo.
- **Independence:** Online education permits students to work independently without interacting with the instructor or other classmates. This is optimal for students with social anxiety or who prefer to learn independently.
- **Self-Pace:** Online courses provide greater autonomy to the students towards over learning manner. Pupil can speed up or slow down your pace based on your requirements if you are working and busy. During that time, pupil can peruse and complete assignments at your own pace without being interrupted. You can also attend one class at a time or take two classes simultaneously.

8. Challenges of Online Education

As there are two sides to a coin, there are also two aspects to online education. Some major disadvantages of online education are listed below:

- Many pupils have difficulty obtaining online instruction. Primarily for students living in rural locations. Because rural locations do not have access to high Internet speeds. Some students really cannot afford the high expense of the classroom technology they need to succeed.
- Students those who are pursuing course, are cut off from the rest of the world. They are connected in a single chamber with technology before them. The students have no interest in extracurricular exploration. As a result of their isolation, pupils become more stressed, resulting in numerous health problems.
- Technology doesn't just teach good things; it also makes it easier for bad things to happen. Students can get side-tracked if they go to places, they shouldn't. If there are any technical issues, the students will suffer a significant loss. There is a possibility that they will miss class or be unable to attend until the issue is resolved.
- Because taking classes online requires more time spent in front of a screen, there is an increased risk of visual problems.
- Only conceptual abilities are well developed, while practical skills are lacking. If it is a physical classroom, concurrent practical training will also be provided.
- During exam time, it is difficult for the examiner to prevent students from deceiving. Only if the pupil is self-disciplined will the exam be administered fairly; otherwise, there is a greater likelihood of cheating.
- There is a significant decline in physical activity among students. In contrast, discrete time is allocated in classroom instruction for drills, yoga, etc.
- Due to social isolation students lack communication skills. Pupils who pursue course through online instruction can't communicate with others thoroughly and feel hesitated.
- Each student's motivation is one of the most debatable disadvantages of online learning approaches. Some individuals prefer face-to-face meetings because they enhance their self-motivation, whereas others prefer online deadlines. In contrast in traditional learning many students are more motivated to complete assignments or tasks when they are surrounded by teachers and colleagues.

- It is simple to maintain concentration in a classroom filled with peers and an instructor, but what about online learning? Remote learning increases the likelihood of distraction if you have competing priorities or are engaged in other activities. Again, we recommend creating a dedicated space to eliminate distractions, which includes removing your phone, television, and anything else that could be a source of distraction during study.

9. Recent Initiative in India towards Online Education

India is making significant progress towards online education, as evidenced by the expanding adoption of digitisation by universities and colleges, rising internet penetration, and soaring student demand. According to RedSeer Consulting, the online education market (higher education and lifelong learning market) in India is projected to reach 5 billion U.S. dollars by 2025, driven by the government's emphasis on designing online education programmes, strengthening digital infrastructure across the country, and catering to students' rising demand for upskilling.

The Indian government also introduced the 'Digital India' initiative in July 2015 in order to strengthen online infrastructure and increase internet accessibility among citizens (such as by connecting rural areas to high-speed internet networks). As part of the 'Digital India' initiative, the government launched an e-Education initiative to provide online learning in rural and urban areas through the use of smartphones, applications and internet services.

The Indian government has taken a number of steps (e.g., the PM E-VIDYA programme, DIKSHA, SWAYAM Prabha TV, Vidyadaan, E-Pathshala etc.) to bring its online education practices in line with global standards and to allow higher education institutions to offer enlarged online and distance learning opportunities to pupils.

To promote E-learning, the Indian government is committed to transforming and covering the level of education for all pupils in remote areas of the country by assisting them digitally and technically to attain education with a single click using digital tools. With the ICT education initiative, the Indian government has modernized and revitalized the education system., it has also played a crucial role in demonstrating the quality and digital reach of its initiatives for the better future of our nation's students.

10. Conclusion

Online education is becoming the trend of the future in India and has a promising outlook. Online education has effectively created new dimensions both inside and outside the academic program in the field of education. In contrast to other sector, online education has benefited exponentially from the pandemic, proving that every cloud has a silver lining. With the expansion of e-learning, the traditional education system has begun to decline. As with every sector, online education faces obstacles, but with the aid of new technologies and government initiatives, these obstacles can be overcome. According to market research analysis, the online education market is projected to expand at a CAGR of over 20% by the end of 2021. In addition, it is anticipated that the number of pupils registering for online education will surpass 9.6 million by 2021, up from 1.6 million in 2016. With the passage of time, digital education methods will become the norm. In the perceptions of the public, the expansion of EdTech platforms over the past two years demonstrates the importance of online education. It has a chance to provide infinite

possibilities for learners if planned and delivered accurately and uniformly to all students. While other sectors have suffered because of the pandemic, online education is thriving around the world, proving that every cloud has a silver lining as well.

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