Navdeep Kaur
North West Group of Institutions, Moga, Punjab, India

Emerging issues and challenges in digitalization of higher education

Navdeep Kaur

Abstract
Education plays an important role in overall development of individual therapy contributing immensely to the overall development of a nation. Education globally is one of the important sectors to witness revolutionary changes in recent times. This is primarily because of digital revolution that has taken place all across the globe. The typical Indian classroom was once characterized by students sitting through hour-long session, teacher used to discuss the things without any visual presentation. Now, thanks to digital technology, it is making life easier for both students and educators. Digital education is fun learning for all cadres and particularly effective for learning as the innovative audio-video feature boosts the cognitive elements in a brain of the learner. Schools are increasingly adopting digital ways of teaching in their academic, and trying to make the classroom environment more inclusive and participatory. The purpose of this paper is to give the overview of digital education, its benefits in India, the future scope and possible challenges of an Indian society for moving towards digital education.

Keywords: Digitalization, higher education

Introduction
Digital education means digital learning. It is a type of learning that is supported by digital technology to make learning effective in a better way. Digital education gives win-win opportunities for all. School, colleges and other institution finds the rapid rise in enrolments and added revenue because of digital education, and on other side students view this as a flexible and alternate option allowing them to study as per their convenient time and pace. Teachers and professors too find it convenient to prepare their teaching plans aided by digital technology. Teaching and learning becomes a smoother experience as it includes animations, gamification and audio-visual effects. Over the last few years digital education in India is evolving at faster pace. It is changing the way students learn different concepts and theory in school and colleges. The traditional chalk and talk method in school and colleges has been slowly changing with more interactive teaching methods as schools and colleges are increasingly adopting digital solutions. Digital learning guarantee more participation from students as the current generation of students are well-versed with laptops, I-pads, and smartphones. There are different private players in the field of digital education like Educomp, Tata Class Edge, Pearson, and Teach Next who are continuously engage and developing different interactive software to help teachers in classroom teaching.

Benefits
1. Benefits to Academic Institution
Academic institution can easily manage their activities with the help of digital education. Some of the important benefits are:

   - Time and money of the Institution gets saved. They can easily plan to conduct online exam and publish the exam results quickly.
• It makes easy transfer of knowledge and equally from teacher to each and every student with the help of effective and advanced technology based teaching tools.
• It helps in creating interest among student which will help them in learning many concepts through interactive-audio-visual teaching contents.
• Advantages over other schools and colleges which cannot provide such integrated feature-based learning and management system.
• Easy communication between Institution and parents for student related academic activities.

2. Benefits to Students
As all the study contents will be taught in the classroom through multimedia slides, it creates interest and enthusiasm among the students. Learning will be fun for them. They are able to memorize many concepts through interactive audio-visual teaching contents. Some other benefits to them are:
• They can easily view their daily time-table, class assignments, any events planned in school etc. from home.
• They are able to prepare projects and presentation online.
• They can give online exam and view their results.
• They can easily collect teaching contents of missed lecture online.
• They can access library online.

3. Benefits to Parents
In today's world, it is difficult for parents to visit the school or colleges because of their busy work schedule. Digital education helps the parents to view all the information of their ward from comfort of their home or office. Some of the other benefits are:
• The web facility of digital education helps the parents to view their child's attendance record, progress in syllabus, timetable, etc.
• They can easily check the subject taught in school, homework given to their ward, any future assignments and projects and guide the ward accordingly to participate and practice.
• Easily view internal and semester exam schedule and results.
• They can easily pay the school fees and other activity charges.
• They can get information on various school events, notices, holidays and can track the presence of ward in the classroom/outside the class.

4. Benefits to Teachers
Digital in education also creates interest among teachers. It helps them to make teaching interaction among students very effectively. Some other benefits are:
• It helps the teacher to manage their class time and teaching content effectively. They can easily avail the school as well as class related information through web.
• They can check daily time-table, assignments, teaching history, events and holiday list, self as well as student attendance etc.
• It will helps in explaining the difficult content easily and in effectively.

Scope of Digital Education in India
Globally India holds an important place in the field of education. There are more than 1.4 million schools all over the country having over 227 million students enrolled across different fields and more than 36,000 higher education institutes. India has become the second largest market for digital education after the US. However, there is still a lot of scope for further development in the field of digital education. There are some major investment and developments that have been taken place to promote the digital education in India. Some of them are:
• A digital education start-up, Byju’s, has raised US$ 50 million from the Chan Zuckerberg Initiative, founded by Facebook founder Mark Zuckerberg for the development of digital education in India.
• Online and classroom-based certification courses offered by Neev Knowledge Management Pvt. Ltd under the brand name Edu Pristine has raised US$ 10 million from Kaizen Management Advisors and DeVry Inc for the development of digital education in 15 cities across the country.
• Intel Corporation, a US based multinational technology firm is planning to provide optimised learning solutions and extended computing technologies to students and schools across the country.
• Ignis Careers and SEED, Hyderabad-based education start-ups are working to provide low-cost school education with the help of digital technology.

Challenges of Digital Education
1. Resistance to change: Every improvement has two sides of coin, with one leading to advancement and development and other relates to certain challenges associated with the implementation of this advancement. Unfamiliar Behaviour of employees towards technology is one of the biggest challenges of Digital Learning, which the managers need to work with it. People of India commonly resist change, even if the changes are superior to what they had previously. It's a fact that eLearning implementation can create enormous change within a company, so implementers can expect to face some resistance.

2. Shortage of trained teachers: A major obstacle in the use of digital education in rural area is the lack of knowledge and skills. There is a shortage of teachers, formally trained on digital technology. In some of the academic institution in rural areas, school teacher and college professors are not interested in using digital tools for conducting classes. They feels that a lot of information is explained to the students at one go through the digital medium and they prefer traditional teaching methods of chalk and blackboard. In rural areas, primary teachers and senior teachers are reluctant to get trained and adopt digital technologies for digital education in school because they are in view that these disruptive technologies are out to replace them permanently.

3. Technological Skills of Learners: The Digital Learning implementation will be dependent upon the computer literacy of the people involved in using it. The ability of the learner's to access and interact with the course material depends upon their knowledge.

4. Evaluating effectiveness: Yet another important challenge of Digital Learning is the task of determining
whether the course is having the intended effect. In the absence of pop quizzes and report cards, how can a person tell whether the eLearning implementation is achieving its goals or not.

5. **Integrating Formal and Informal learning:** In India, informal learning is most prominently used and this makes it very difficult to convert this informal education into formal way of learning using digital technology.

6. **Resource and internet connectivity related challenges:** One of the main challenges for digital education in India is poor internet connectivity in rural areas and some part of urban areas. Majority of population across India has still no access to internet and a large population in rural areas is still illiterate in the field of digital technology. More Innovations required to make the digital education more interactive and robust.

7. **Language and content related Challenge:** Languages is one of the main barriers for the development of digital education in India, there are several different languages in different state have been spoken all across country, pushing all the digital content in all these regional languages some time becomes difficult for the agencies.

**Conclusion**

Education sector in India has seen a series of rapid expansion in last few years which helped to transform the country into a knowledge zone. The study clearly points that development of education infrastructure is required for the development of digital education across the country. Government of India has also taken major Initiatives for the development of digital education in India like opening of IIT’s and IIM’s in new locations as well as allocating grants for education to research scholar sin most government institutions. Though there are many challenges faced by the institutions in the implementation of digital technology but the benefits from the digitalization are much more. These challenges can be resolved using measures like effective communication process, incentives to teachers and students, adaptability to new courses etc. Therefore, government must ensure the application of digital technology in higher education to motivate students and teachers both to learn in an effective manner.

**References**