International Journal of Applied Research

Arshpreet Kaur
Tagore College of Education, Fatehgarh Korotana, Moga, Punjab, India

Digitalization: A Boom of Distance Education

Arshpreet Kaur

Abstract
The aim of this paper is to highlight the role digitalization in distance education. Day by day as information technologies improving, the mode of learning is changing from classroom to online. It describes the era of 21st century in terms of educational progress and how the 'old school' system became the 'new school' system that boosted digital education. Smart phones, laptops, and tablets are no more unknown words. During this phase the education system is evolving for the sake of betterment, as this generation's students are not born to be confirmed by the limits of simple learning; their curiosity is vast and cannot be catered with educational system that were designed earlier. If we kept on teaching our children the way we taught them yesterday, we would deprive them of their tomorrow. Distance education is getting more dependent on digital technology and had been playing important role in the delivery strategies of distance education. With the advancement of in technology in the field of education has introduces variety of new techniques for educators and learners to enhance knowledge.

Keywords: Digitalization, Education

Introduction
"Technology can become the 'wings' that will allow the educational world to fly farther and faster than ever before; if we will allow it."

– Jenny Arledge

Education is the basic need of every human being and today's technology has a big part in every sphere of life. In fact, Education is the most important investment by countries, societies, families and individuals for the future. Today's society is said to have entered into the age of a new social revolution, i.e. 'information revolution'. 21st century has witnessed the explosion of information technologies. By digital revolution, technologies in computers, audio-visual devices, and communication are integrated into a powerful technology-information technology. The global era is characterized by rapid advancement in technology and expansion of knowledge. Basically technology is nothing but a tool used in implementing our ideas and methodology in education. The application of new technologies in the distance education context provides today's global society. Teaching the distance learners require different skills to prepare relevant learning materials to facilitate the construction of knowledge and learning.

Digitalization
Digitalization means integration of digital technologies into everyday life by the digitization of everything that can be digitized**.** Digitalization also means that more and more information is transmitted and stored online.
The conversion of text, pictures or sound into a digital form that can be processed by a computer. Digital means (electronics) a circuit or device that represents magnitudes in discrete units of a physical quantity.

Correspondence
Arshpreet Kaur
Tagore College of Education, Fatehgarh Korotana, Moga, Punjab, India

Tools of Digitalization
1. Computer
2. Internet
3. Smart phone
4. Scanner
5. Digital camera
6. Projectors
7. Printers

What Is Digitalization of India
Digitalizing India i.e. a vision to transform India digitally by infusing technology in governance also known as E-Governance. This campaign was started by our PM Narendra Modi in 2015 with a prior objective of connecting people digitally with the new transparent and responsive government like for example, railway computerization, land record computerization, providing digital literacy, availability of high speed internet, mobile phone and bank account space, providing services in online platform etc.

Distance Education
Distance education or long distance learning is the education of students who may not always be physically present at a school. Traditionally, this usually involved correspondent courses wherein the student correspondence with the school via post. Today it involves online education. Courses that are conducted are either hybrid, blended or 100% distance learning. Massive open online courses offering large scale interactive participation and open access through the World Wide Web or other network technologies, are recent development in distance education.

Need and Importance of Distance Education in India
Distance Education gets overwhelming response in India. However, even in this system, the actual aim of providing quality education is getting replaced by the aim of making more money from students by the institutes. The universities running distance education as we don't want to look back and take a fresh start again. Following are top needs and importance of quality distance education in India:

1. Rapid growth of education: With the advancement of education and technology, it is almost impossible to incorporate new changes through formal education.

2. Population: The unimagined growth rate of population has declined the chances for formal education to educate each and every student.

3. Geographical limitations: Students who live in places which are geographically isolated find it tough to take education through regular manner.

4. Qualification improvement: Distance learning offers possibilities to candidates who want to enhance their qualification while being in their present job.

5. Desire to work and study: If you're capable of earning while learning then it is the most favorable advantage you have with distance education

6. Education for all ages: Distance education is for people of any age group.

7. Financial circumstances: Distance learning s also highly accepted in India because of financial and family responsibilities of many young candidate.

8. Faster promotion: Studying for higher education while working may result in high and improved knowledge and skills which ultimately enhance your chances of promotions.

9 Flexibility factor: Flexible education is what everyone wants and distance learning offers you the same.

Relevancy of digitalization in education
No doubt, with the passage of time we all have seen a lot of changes in our country and one of those changes include within digitalization is "Digital Education". With countless benefits this new trend has enabled learners to learn anything they want without depending on anyone. No longer did one need to have access to schools, time or a lot of money. All one needed was a good internet connection and a computer or an android phone. This new mode of imparting education is having a lot of benefits not only learners but also for educators. So a lot of online learning portals are available for learning online which can be classified into:-
Government Learning Portal which are obviously provided by government and non-profit earning portals which means online courses are provided free of cost. Some of government learning portals are NPTEL, Swayam etc. Which are funded by MHRD, Government of India.
Non-Government Learning Portal which are provided by private organizations/companies which can be for profit or non-profit earning depending upon moving of company. Some of non-government learning portals are Topper, Udacity etc.

Benefits of Digitalization in Education
Among those countless benefits some of benefits of digital learning are:
- Digital learning empowers the learners to receive par excellence, quality education anytime and anywhere. Whether it is career and technical education or project based learning, it provides learners a more interactive platform for learning and assessment.
- Free online courses open up avenues for both education providers and students.
- Online education gives students an opportunity to plan their future courses of action and fast track their careers.
- Quality educators are available for teaching.
- Such offerings are changing the way India learns by giving students an edge in learning, along with an opportunity to progress in their career.

Reasons for the growth of digitalization in education
- With nearly a billion people on mobile phones and over 200 million mobiles connected to the internet, there has been a considered rise in digital learning.
- The real time learning and feedback methods and personalized instruction has encouraged online learning.
- People are stepping towards digital learning as the edu-tech firms are providing them the comfort of 'live and interactive' anywhere learning in digital format, through its online programmes.

- These online courses are affordable or even free of cost and easily accessible.
- Even top educators prefer digital learning as they deliver their same lecture in a different manner while receiving more than usual payment.
- Further learners don't need to depend on any particular educator like in physical bound classroom. They can choose from a wide range of educators which is also one of the reason for its growth.
- With the digital India programme's vision to transform India into a digitally empowered society and knowledge economy, the education sector in India is poised to witness major growth in the years to come. Technology-led reach an easy access will bring about a socio-economic difference in the lives of Indian learners. Further, this Digital Education will also increase employment as well which will obviously result in growth of country

Means of Digitalization in Distance Education
1. Online admission
2. Online exams
3. Web based Sharing
4. Digital material ppt, pdf, docs
5. Learning management system
6. Groups on social networking
7. Digital publication

Digitalization: A Main Tool of Distance Education
In today's era, if we want to educate the every person of society, then we must adopt the different modes of education. Distance education is one of the best mode of education to educate every learner for higher education but without digitalization it is almost impossible. Several tools of digitalization are used in distance education. So, the both digitalization and distance education are correlated with each other. We use the different types of gadgets and modes in distance education. Some of the examples are given below

1. MOOCs (Massive open online course)
A massive open online course (MOOC) is an online course aimed at unlimited participation and open access via web. In addition to traditional course materials, such as filmed lectures, readings, and problem sets, many MOOCs provide interactive courses with user forums to support community interactions among students, professors, and teaching assistants, as well as immediate feedback to quick quizzes and assignments. MOOCs are a recent and widely researched development in distance education, first introduced in 2006 and emerged as a popular mode of learning in 2012.

2. Synchronous e-learning
Synchronous e-learning is commonly understood as instructor led training, that is delivered in digital format. It involves an instructor being online at the same time as the student. Synchronous e-learning can be delivered to just one person at a time, or to multiple people, and includes online tutoring, lectures, or meetings between peers.

3. Asynchronous e-learning
Asynchronous e-learning is curated content that is delivered in digital format, allowing students to progress through it at their own pace. It can be as simple as an online video tutorial, or it can be a complex program that combines video tutorials, readings, info graphics, and audio overlay, to guide users through branched learning scenarios. High quality asynchronous learning usually includes feedback, testing, and additional learning prompts.

4. Blended e-learning
Blended e-learning is a combination of synchronous and asynchronous, and tries to take the best of each to provides a seamless learning experience for students. It allows users to progress at their own pace and dig deeper through asynchronous modules, while providing real time support from an instructor during synchronous session. Deepening on your learning goals and objectives, you will want to ensure you incorporate the right style of e-learning into learning strategy. Typically the type of e-learning that works best is based on your personal schedule and time constraints, geographical location, budget, and learning style.

5. Online courses
Want to learn a new language or may be to get trained in some specific course, but have no time to cover the distance? Online courses are developed by experts who have unmatched proficiency in their specific field and can give you the experience of real-time learning by designing their own online course. So we can learn anything through online courses.

6. Online exams
Digitization gave way to the online exam, making tge examination process convenient for both teachers and students.

7. Digital textbooks
Digital textbooks are also prevalent with other names like e-textbooks and e-texts, digital textbooks provides an interactive interface in which the students have access to multimedia content such as videos, interactive presentations, and hyperlinks.

8. Open schedule online courses
An open schedule online course is a type of online distance learning option that gives learners greatest amount of freedom to complete coursework provides mailing lists, internet-based textbooks bulletin boards, and e-mail. At the start of classes, the learners are given a set of deadlines; however, they are allowed to work on their coursework at their own pace so long the complete within the time limit. It is best learning options for learners who do not procrastinate or work independently.

9. Fixed time online courses
Fixed time online course is another type of distance learning that requires learners have access to the internet. As the name suggests, learners must log in their official online learning site at a particular time. Most people find online learning more interactive than any other types of distance learning simply because the option allows them to communicate directly with instructors, tutors, and fellow students in real time with the help of live chats or teleconferencing apps. With this app, students can download study materials, submit assignments, complete assignments online, participate in virtual classes and attend webinars and so on.

Some Initiatives from Government to Promote Distance Education through Digitalization

There are many initiatives has been taken below to enhance distance education through digitalization or e-learning, some them are discussed below:-

1. E-Gyankosh

The e-gyankosh30 is a national digital repository developed by IGNOU for sharing learning content. It is a learning platform of students to read content or watch videos of lectures. It has over 2200 video programmes in addition to e-content related to different subjects.

2. NPTEL (National programme on Technology Enhanced Learning)

NPTEL is a project funded by the Ministry of Human Resource Development. It was first conceived in 1999 to pave the way for introducing multimedia and web technology to enhance learning of basic science and engineering concepts. It has 129 web courses and 110 video courses in the field of science and technology. Each video course consists of 40 video lectures of one hour and text, images, animations and graphics.

3. Medvarsity

Medvarsity is India's first medical e-learning programme established in April 2000. It is an initiative by Apollo Hospitals Group, the leader in healthcare in Asia Pacific Region**.**

4. BITS Pilani

Birla Institute of Technology and Science has established a virtual university, with DIT sponsorship. BITS has been single pioneer in distance education**.**

Conclusion

India is an emerging economy and it required skilled people for the development. The education is one of the biggest challenge that is India facing. There are not adequate colleges, institutes and universities to provide education to all. The distance education can ensure the availability of education without social, physical and geographical restrictions. The implementation of digitalization in distance education can reduce the problems related to distance education. That's why digitalization is a main tool of distance education.

Reference

1. Rao VK. Distance Education. New Delhi: A.P.H. Publishing Corporation, 2003.
2. https://www.quora.com>what is digitalization of India. Retrieved on 26/02/2019 at 9:05pm
3. https://www.elearningindustry.com>digitalization of education. Retrieved on 24/02/2019 at 8:23pm
4. https://www.iraj.in>journal_file>journal_pdf elearning a boom for distance education-IRAJ. Retrieved on 24/02/2019 at 9:10 pm
5. https://www.academia.edu> role of e-learning in distance education in India. Retrieved on 25/02/2019 at 11:11am
6. https://www.nibs.in> distance education in India: its need and importance-NIBS. Retrieved on 25/02/2019 at 11:29am
7. https://www.quora.com> what are the advantages and disadvantages of India. Retrieved on 26/02/2019 at 2:17pm