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Digitalization in higher education

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Abstract
Education in past time was centered on sources such as schools, teachers and print media. Information was not accessible by the majority of people. Also it was very difficult to obtain current information with respect to today's context. However, in present scenario, the world is moving from an information society to a knowledge society. People want to know the information as it happens and when it happens. Advancement of digital technology has opened up many avenues of wisdom and thus made information accessible and transmittable from anywhere and to all groups of people. Present paper describes how technology is used to access and apply knowledge, how this technology has been used in education and its impact in general.

Keywords: Digitalization, Digitalization in higher education

Introduction
Mere traditional classroom teaching is now a matter of the past. Introduction of technology has revolutionized the way teaching is conducted. It offers the flexibility for learning to be available to students at any desired time or place. Digitalization of education has also blurred the borders that were previously defined by students and teachers being present in the same location at the same time. Over the last decade, distance and online learning is becoming increasingly popular in India. Online learning courses are on the rise and have been facilitated by the increase in digital technology now being available in most of the country. Additionally, with the introduction of the learning management systems (LMS), student assessment through digitalization technology is now a reality. Students can also interact with their peers in and outside of the classroom. The aspect of peer centered learning has also helped to steer the soft skills of the students. LMS would positively impact the teaching process and student assessment. Furthermore, it provides an opportunity for students and faculty to attend or conduct a session from an off – site location, therefore making the world seem smaller and more accessible.

Digitalization means transformation of all information types (texts, sounds, visuals, video and other Digital technologies help teachers to reduce paperwork: exercise books and reports are replaced by laptops or tablets, with all the required academic information available. Home tasks of students, except when special teacher's references are required, can be automatically controlled by software tools. a from various sources) into the digital language. Students gain apparent benefits as well. State-of-the-art digital technologies make it possible to work at any task in a group, exchange views and ideas with classmates and the teacher, project own life journey and deliver better results within a shorter period of time. Such devices as interactive tablets for presentations, seminars and conferences make it possible to 'catch an eye' of larger audiences, just as 3D modeling technology makes it possible to visualize any idea by graphic representation in 2D plane, helping to meet the challenges in a creative and informal way.

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Digitization has no doubt changed our education system, but we cannot say that it has diminished the value of our old time classroom learning. Neither do we want something so priceless to turn into dust. Education system world over is going through rapid transformation. Value derived out of centuries old factory model is being fundamentally questioned. Digitizing education has been an imperative keeping in mind the affordability, accessibility, inclusiveness of the large trainable youth population. Digitalization of education is a powerful trend in terms of reformation and modernization of global education environment. The best part about the digitization of education in the 21st century is that it is combined with the aspects of both; classroom learning and online learning methods. Walking hand in hand both act as a support system to each other, which gives a stronghold to our modern students. Digitization in education has also proved to be the right method for saving resources. Online examination platforms have restricted the frivolous usage of paper, directly confining the cutting down of trees.

Digitalization in higher education is the need of the hour in present scenario.

Abundant information on any subject is available on many sources like Youtube, Facebook, and Wikipedia. The online education has added new options of teaching, and hence has created a wide variety of new courses. New ways of teaching include information and communication technologies such as cable and satellite transmissions, audio and video conferencing, PC software and CD-ROM's and in particular the Internet sources. This wide variety of means increases the accessibility to the rest of the world. Digitization of education can enable this disruption and provide a platform for the next generation workforce and touch a billion lives

In India there are many institutions such IITs and IIMs that have in recent years opened satellite campuses abroad, or have signed memorandum of understandings (MOUs) with some foreign universities to offer online education.

Digitalization in higher education provides
- **Online courses:** Want to learn a new language or maybe 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.
- **Online exams:** Digitization gave way to the online exam, making the examination process convenient for both teachers and students.
- **Digital text books:** Also prevalent with other names like e-textbooks and e-texts, digital textbooks provide an interactive interface in which the students have access to multimedia content such as videos, interactive presentations, and hyperlinks.
- **Animation:** This is a captivating approach in which students learn in a better manner. By offering a visual representation of the topic, students grasp the concept in a more understandable manner. Even the toughest topics can be presented in a simplified way with the help of animation.
- **Massive Open Online Courses (MOOC):** Massive Open Online Courses (MOOC) such as Swayam (for teachers' training) have seen use of technologies, the Government is also emphasising on boosting the use of

tools such as virtual lab, virtual reality (VR)-enabled classrooms or curated online content for both students and teachers.

Digitalization in higher education reflects in mainly three areas
1. **Technology and Learning:** The larger role of digital technology in learning have caused a shift from students being recipients of information in a traditional lecture setting into students being an active participant in the learning process (Zandvliet, 2004). Technology of today also allows students to be active participants even when they attend distance courses (Heigh, 2004).
2. **Technology and Teaching:** Kirkwoods' arguments therefore mean that although the main impact of digital technology in HE is on the teaching process, the main challenge is to make sure the new teaching methods improves learning.
3. **Digital technology and organizations:** When new digital technology is introduced, organizations will have to change structurally as well as culturally (Alavi & Leidner 2001; Kolb & Kolb, 2005). Furthermore, the current trend in education where on-campus education is substituted by Massive open online courses (MOOC) results in a need for even greater changes in higher education organizations (Brahimi & Sarirete 2015, Melton & Burdette, 2011).

Digitalization of higher education as a boon
The digitization of education industry in the 21st century proves to be a boon to our society because:
- **Enhanced Teaching and Learning:** Technological developments like digital cameras, projectors, mind training software, computers, PowerPoint presentations, 3D visualization tools; all these have become great sources for teachers to help students grasp a concept easily. It has to be understood that visual explanation of concepts makes learning fun and enjoyable for students. They're able to participate more in the classroom and even teachers get a chance to make their classes more interactive and interesting.
- **Globalization:** Students can meet their counterparts through video conferencing without leaving the classroom. • Some sites, such as www.glovico.com are used to help students learn foreign languages online by pairing a group of students with a teacher from another country.
- **No Geographical Limitations**: With the introduction of online degree programs there is hardly any need of being present physically in the classroom. Even several foreign universities have started online degree courses that student can join.
- **Distance learning and online education:** Distance learning and online education has become very important part of the education system nowadays.
- **Accumulation of Students on the Same Platform:** With students coming in from various regions, schools and colleges are finding ways to develop an integrated solution to meet the educational needs of all students. By converting the whole of the educational system to digitization, the use of various techniques like online courses, online exams, digital textbooks, quizzes, and e-notes are improving the quality of education for the students.

- **Online Resources: Connecting Students with Their Educators:** With a high increase in the student population in recent times, pedagogy is being compromised. Because of that, online resources are being developed in a way that makes them always available to teachers to educate the masses. Which, in turn, improves the quality of education and increases the number of literate students?

Digitalization of higher education as a curse

Digitalization of higher education has been proved a curse because:

- **Declining Writing Skills:** Due to the excessive usage of online chatting and shortcuts, the writing skills of today's young generation have declined quite tremendously. These days, children are relying more and more on digital communication that they have totally forgot about improving their writing skills. They don't know the spelling of different words, how to use grammar properly or how to do cursive writing
- **Increasing Incidents of Cheating:** Technological developments like graphing calculators, high tech watches, mini cameras and similar equipment have become great sources to cheat in exams. It is easier for students to write formulas and notes on graphing calculators, with least chances of being caught.
- **Lack of Focus:** SMS or text messaging has become a favourite pastime of many students. Students are seen playing with their cell phone, iPhones day and night or driving and very often even between lectures. Being ever-connected to the online world has resulted in lack of focus and concentration in academics and to some extent, even in sports and extra-curricular activities.

To conclude, we can point out that digitalization has helped transmit education faster, more efficiently and at a lower cost. The digitization of education industry in the 21st century proves to be a boon and curse for higher education. But the challenges for its future delivery are unspecified and somewhat unpredicted. It will be interesting to see how we tackle these challenges in futures.

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