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Digitalization: Education's changing landscape

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Abstract
"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

We are entering the 21st century where technology knows no boundaries. This is the phase of radical development where technology invades every niche. Smartphones, laptops and tablets are no longer unknown words. During this phase, the educational system evolves in a concern for improvement, because the students of this generation are not born to be confined within the limits of a simple apprenticeship; their curiosity is great and cannot be sourced with education systems designed earlier. If we continue to teach our children as we taught them yesterday, we would deprive them of their future. Our old education system does not have the capacity to defend itself in the 21st century. We are therefore obliged to use digitization in our educational system. When we talk about Digital India, a dream perceived by our worthy Prime Minister Mr. Modi, we can think of a complete digitization. All Indian citizens, starting with children, should be numerically independent, which would require the creation of a digital infrastructure that serves as a tool for every child. Digital learning offers many benefits to transform a child's life, including: motor skills, decision-making, visual learning, cultural awareness, improved school performance, inventiveness, and more. Moreover, the traditional training instructions in combination with digitized learning, is one of the means by which our future generations can become global contributors who are better able to interconnect across culture, time and geography.

Keywords: Digitalization, Technological Advancement, Paradigm Shift

Introduction
Electronic information technology has reformed every sector it understands and is currently in the promising phase of academic transformation. In the coming decades, if information technology approaches, education will be profoundly changed, more immersive and, hopefully, more constructive for people than it is today. Digitization in the education sector has profoundly changed learning, but also the teaching process.

Technology has provided stress-free education for students and educators. Schools are progressively implementing digital pedagogical solutions to engage a generation of PlayStation and iPad familiar learners, and strive to make the class atmosphere more inclusive and participatory. Information and communication technologies in education have facilitated students' understanding. They may be the most able and exposed to external education, but they are better able to absorb what is happening in the classroom. At present, students live in a world that is constantly connected and living outside the classroom. Traditional methods do not work anymore. The real revolution in education can only be achieved by digitizing education so that students can learn at their own pace, both in class and out. Their learning upgrades while they carry on to advantage from fostering, mentorship and direction of their teachers.

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What is Digitization?

"Digitization is the integration of digital technologies into everyday life by the digitization of everything that can be digitized."

Yes! Digitization is the trending word that describes the 21st century in the most accurate way possible. We are at a time when unprecedented ideas are emerging in our education sector and creating unprecedented progress for technology.

Significance of Digital Education for Children in India

Children are growing up in a very different world than that of their parents. Mobile phones, computers, YouTube, Netflix and Facebook are integrated into their daily lives. Even toys are digital and many are programmable. When we talk about digital India, a dream perceived by Mr. Modi, we can think of a complete digitization. All Indian citizens, starting with children, should be numerically independent, which would require the creation of a digital infrastructure that serves as a tool for every child. Knowing how to use these technologies is one thing. The importance of technology in schools is so obvious in the current generation that students unfamiliar with computers will have difficulty in their future trades, since most competing tasks with others require some type of work computer.

Technology is not just about playing games online or watching animated videos, etc. The benefits of technology depend on how children, parents, and teachers choose to use it to enhance their learning. When used for educational purposes, the latest technologies can help create more active and meaningful learning opportunities. When learning about Internet programs, children understand and innovate with the digital world in which they live. Today's children are born into a technology-based society and learn very early to access the Internet. As parents, it's our job to talk to them about the pros and cons of the Internet, to teach them the safe habits of the Internet, and to use strategies to help them do so safely.

They must learn the basics, challengers and accelerators, including how to use the Internet outside games to gain knowledge. Nowadays, online lessons allow children to learn individually multiple activities. They must be safe online with all the dangerous threats while being productive and constructive. Digital literacy is one element that makes a child responsible for how he uses technology to interact with the world around him, what new areas he can acquire new knowledge, and so on. Also there are so many online websites which are knowledge acquisition platforms for children where they can compete and learn intellectually.

Digital learning offers many benefits to transform a child's life: motor skills, decision making, visual learning, cultural awareness, improved academic performance, creativity, and more. Now a day's students are able to use the internet to research and find text sources, videos, pod casts and presentations related to any topic they would like to learn about. Learning is by nature a social activity and rather than trying to prevent children from joining online networks, we should encourage them to learn safely. Digital literacy is here to stay and if we really want to take advantage of the potential benefits of digital learning, we need to provide appropriate resources for our schools and teachers.

Paradigm Shift in Education Due To Digitalization

In terms of education the digitalization means we should create Knowledge that is accessible virtually with the focus on the student. Virtual access is achieved through Internet or Intranets. Techniques such as e-mail, web notices, discussion forums and video conferencing allow a student to access information without visiting the physical location of delivery. A typical interactive e-learning system will have the following characteristics and thus demonstrates the paradigm shift in education.

1. Classroom Level

The use of technology at the classroom level was not possible until teacher delivery mechanisms were assisted by technology. Initially, the dissemination mechanism was based on verbal communication and then on the introduction of written materials such as tables. Later, thanks to overhead projectors, teachers were able to write in advance and project them directly. Using overhead transparencies allowed them to reuse written media without improving it. Thanks to the invention of computer projection, a teacher can easily update his material. The same material can also be printed and students can get it without having to copy it. This technology has now a day's evolved not only to project text and figures, but also animations, video clips, etc. Thus, teachers are now better equipped with tools to teach effectively.

2. Teacher's Role

In the global modern learning environment, the role of the teacher is shifted from "information provider" to "learning facilitator", as it only has to guide active students who are using online learning material. Classrooms have been fully equipped with different teaching learning resources like permanent multimedia projectors and computers, and the facilitator must be able to access the e-learning system via the intranet. Teachers should not control the learning process as much as they should allow students to work collaboratively and make certain decisions on their own.

3. Student's Role

Some classrooms are equipped with computer access for all students. In such cases, students participate interactively in the learning process. From now on, the student focuses exclusively on the learning process than copying notes, because the learning material can be consulted later. Teachers must ensure that knowledge and skills are not presented to students directly, but build them in response to information and learning tasks. Teachers need to think about how these learning experiences might be encouraging for students doing this kind of mental work.

Thus, students who used to learn facts and skills by absorbing content presented by teachers and media resources should strive towards creating personal knowledge by acting on the content provided by teachers, media resources and personal experiences. Emphasis should be placed on the acquisition of superior skills, such as problem solving and critical thinking.

Digitalization in Higher Education

Digitization is also prompting higher education as never before. Nothing is inevitable and we have the supremacy to shape the way we use technology. The digital revolution is making its way into the classroom. It is now possible to have archives in each class or even in the pocket. As Google CEO Eric Schmidt said that, "the internet is not enabling inevitable change faster, it has become the engine of

change." The new teaching learning phase has begun and involves a variety of advanced techniques such as:

➢ **Online courses**
When anyone want to learn a new language or maybe to get trained in some specific course, but they have no time to cover the distance? Online courses are good options. These 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**
The process of digitization gave way to the online exam, making the examination process very convenient for both teachers as well as students.

➢ **Digital textbooks**
Also popular with other names like e-textbooks and e-texts, digital textbooks that provide an interactive interface in which the students have access to different multimedia content such as videos, interactive presentations and hyperlinks.

➢ **Animation**
Its a captivating approach in which students learn in an effective manner. By offering a visual representation of the topic, students are able to grasp the concept in a more understandable manner. Even the difficult topics can be presented in a simplified way with the help of animation.

Benefits of Digitalization in Education
1. Accumulation of Students on the Same Platform
The students 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 entire education system into digitalization, the use of various techniques such as online courses, online exams, digital textbooks, quizzes and e-notes improves the quality of student education.

2. Online Resources: Connecting Students to Educators
With a sharp increase in the student population in recent times, pedagogy is compromised. For this reason, online resources are developed so that they are always available to teachers to educate the masses. This, in turn, improves the quality of education and increases the number of literate students.

3. Internet: Making Digitization Possible
After the United States and China, India has become the third largest consumer of the Internet. The existence of basic online education platforms is possible with the Internet. Most schools and colleges in India use the Internet and use it primarily to conduct online exams and quizzes.

4. Administrative Activities: An Integral Part of The Education Industry
Digital systems are predominant in education, we observe different levels of ease in online education, but the administrative part is not left behind. Keeping student records and maintaining attendance and role numbers is a big headache, too, when there are more students than administrative leaders. For example, colleges and schools are adopting more computer-based methods and avoiding old manual methods of record-keeping.

Lack of Infrastructural Facilities for Digitalization in Education
Educators face the problem of equity when considering introducing technology to learn. Developing a country and providing equal facilities for all is impossible with the existing free education system and policy implementation processors. Trying to solve the problem of equity and introduce technology at the classroom level will have the effect of making the country regress from the others and encourage migration as people are always looking for better opportunities to improve their lives.

Each student must have access to the computer to successfully implement the ideas above. Thus, the student-computer ratio must increase. It is recommended that all educational institutions have computers with a minimum ratio of 1: 5, while those who teach computers have a minimum ratio of 1: 3. All teachers must have unlimited computer access so that teachers can prepare their teaching material. Word processing is the most frequently reported application. The most frequently mentioned categories of use are word processing, Internet search and CD-ROM search. As a result, the percentage of schools with Internet access needs to be increased and eventually all users should have access to the Internet. Low Internet bandwidth and high cost of use is a bottleneck.

Conclusion
Digitization has undoubtedly changed our educational system, but we cannot say that it has diminished the value of our former classroom learning. Nor do we want something so priceless to turn into dust. The best part of the digitization of education in the 21st century is that it is combined with aspects of both; classroom learning and online learning methods. Walking hand in hand acts as a support system to each other, giving a strong place to our modern students. Digitization in education has also proven to be the right way to save resources. Online examination platforms have limited the frivolous use of paper, thereby directly limiting the cutting of trees. Thus, the digitization of the education industry in the 21st century is proving to be a boon for our society. This grouping of traditional training instructions, in combination with digitized learning, is one of the means by which our future generations can become global contributors who are better able to interconnect across culture, time and geography.

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