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**Digitalization of Education: A great change in  
teaching-learning trends**

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**Abstract**

Digital Education can be characterized as a web based learning which viably makes utilization of the information to give knowledge to the students. Gone are the days of blackboards, chalks and dusters. They have been replaced with web-based teaching which strengthens students' learning skill. In fact, this has been introduced only a few ages ago and has got a great response from all over the world. It is also known as the Smart Teaching Skill. Most of the learning institutions have willingly adopted this technique, thus, bringing an immense change in the educational system. In the classrooms, students are taught with the help of large screens and projectors which is beyond the conservative way of teaching. Digital Learning helps to learn anywhere and anytime. Education system creates hope and it should never aim to create mere hypes. Over a period of time, many changes have occurred in different sectors of economy including the education system. Education sector unlike any other sector has seen many stages in its evolution. From Guru-Shishya system of conducting the class in open garden under the trees to closed class room lectures, presentation form of teaching with the aid of LCD touch-screen projector to online notes and now instant Whatsapp messages is the buzzword among the students. Whatsapp has gained the status of being authentic formal means of communication among the students and the academicians. Screenshots have taken off the business of many of the photocopy outlets operating within many school and college premises. Indian subcontinent is comprised of diverse population belonging to various ethnic and cultural groups. Apart from these differences, the most visible difference that makes a direct impact on the Indian education system is the diversity in purchasing power and affordability of the Indians. This paper shows that how digital education is helpful for students and refining our education system.

**Keywords:** Digital Education, Learning, Technology

**Introduction**

*“I dream of a Digital India where quality education reaches the most inaccessible corners driven by Digital Learning.”*

~ Sh. Narendra Modi

There is a global concern that our educational systems are obsolete and failing to promote the necessary skills that can adequately prepare our children for the future. The earlier generations' drive to study was robustly rooted in conscientiousness. The new generations have different motivational profiles with respect to their lives, interest, emotions and engagement. Teachers' role in the 21<sup>st</sup> century has become more complex in the present changing world; here knowledge is almost unlimited. Teachers are expected to become technologically oriented and responsible not only for their teaching but also for their students' learning. They have to cater for particular needs of individual students in heterogeneous classes and create a student-centered learning environment which endeavors for excellence and offers opportunities for enquiry and dynamic learning. Teachers need to meet the standards of the curriculum while enhancing students' creativity, curiosity and motivation.

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### The most obvious benefits of digital education

Digitalization of records, attendance and examination papers has taken place. But the gains are much more far-reaching in the area of e-Education. Students not only get access to instant information about anything but learn much better when digital classrooms open up the possibility of live and experiential education. A digital classroom is often no more than a connected computer attached to a projector but it opens up new magical world to the students. On the other hand, teachers can prepare better lesson plans and engage in participative teaching a lot easier. Learning becomes much more fun and enrolment increase dramatically. What's more, the fun can multiply many times over when tablets are distributed or when students use smartphones even when classes are over. Higher education institutions get a number of opportunities as the result of the digital revolution. This is because higher education institutions perform a number of scholarship functions including teaching and research which are affected by the availability and usage of digital technologies (Weller & Anderson, 2013) [5]. In the new digital and knowledgeable society in the 21<sup>st</sup> century, education is facing great challenges from traditional ways of learning towards innovative ways of learning. It also raises great demands for the transformation of teachers' roles from the traditional knowledge transmitter to a new set of roles such as facilitator and coordinator. This transformation requires that teachers should face their new tasks in a more flexible way and be prepared for their new roles. While the introduction of Information and Communication Technology (ICT) and other digital technologies in some higher institutions of learning has yielded positive results as the birth of interactive learning has called into question the acceptance of such teaching tools and the new roles that teachers have to play (Avishakar, 2013) [1]. The role of teachers has transferred to a more broad and diverse definition to meet the needs of learning communities. I think the way how teachers view and interact with students is changing as well. In a diverse society, teachers should view each student as an individual and facilitate learning based on personal interests. It's the diversity and individualization that make the world unique and special. Even though it sounds difficult but it is not impossible. The rising question is how teachers know all kinds of knowledge and skills to teach every student with different talent? As a result, this is where networked learning comes into play.

Lentell (2003) states that academicians have to be knowledge experts, effective listeners and communicators as well as coaches, facilitators, mentors, problem solvers, designers, supporters and resource coordinators. As an effective teacher in the digital era, he/she has to know where to find relevant information, how to solve problems and what to keep up learning. Generally speaking, a teacher has to improve teaching methods and develop professional learning continually along with new developments. Hence, teachers in the 21<sup>st</sup> century have to comprehend that change is inevitable and must accept as well as prepare for growth. Most essentially, learning from networks related to professional developments or personal interests put away teachers' time-consuming efforts and prepare them with rationality when change happens. If the teacher employs digital resources judiciously, he can create a digitalized environment having the following effects on teaching-learning process.

### Basic Effects of Digitalized Education on the Teaching-Learning Process (Education System)

- Has an improving effect in terms of quality of students' work and practical examples through visualization.
- Improves poor handwriting and language skill through word processing.
- Facilitates self-pacing with increased capacities to deal with individual learning styles as students can work at the pace and intensity suitable to their needs.
- Enables collaborative learning with little indication of the isolated learner.
- Encourages use of peer coaching and peer reviews.
- Develops communication skills and awareness of different audiences.
- Has impact on resource-based learning and access to real world information through the web.
- Enhances information consistency and accuracy adding to authenticity of learning tasks with pragmatic and advanced information.
- Augments learners' motivation through practical activity, visual demonstrations and improved modes of presentation.
- Promotes independent learning and individual preferences for process, outline, method and design.
- Furnishes learners' more control.
- Lets learners to produce high quality multimedia products.
- Transforms teacher practices, planning tools and assessment rubrics.
- Boosts opportunities for classes to advance and for learner experiences to shape results.
- Inspire students to be committed to learning and to contribute in learning activities.
- Develop students' higher-order thinking, their ability to apply knowledge and skills to analyse challenging problems, grasp broader concepts and devise new ideas and solutions.

In this digital era, a teacher working in higher education institute has to understand difference between "learning about" and "learning to be" and implement the later for the effective learning outcome among the learners. Proper involvement of the learner ought to be ensured in the discipline which is meant for learning to be i.e. if a learner is enrolled in teacher education programme, he should have direct exposure of teaching skills. The digital periphery can be accommodating to learner for the content exploration to work out lessons in a digital form and teacher's role from technical to teaching point will be crucial. The role of teachers has changed and continues to change from being an instructor to becoming a constructor, facilitator, coach and creator of learning environments. Today, teachers are required to be facilitators helping learners to make judgements about the quality and validity of new sources and knowledge, be open-minded and critical independent professionals, be active co-operators, collaborators and mediators between learners and what they need to know and providers to scaffold understanding (Weinberger, Fischer & Mandl, 2002) [4].

Today, we can't even remember the world without technology, self-driving cars are not a far future. Many of us don't even know the world that existed before digital technology emerged. We can find it in pretty much any part of our society. We can connect to the internet from any

place in the world. We have computers on every step. Smart phones are pocket computers that we bring with us everywhere. Digital technology is really everywhere and it has changed the world in more than one way. We can find any information that we want online from numerous sources. But it has changed one important part of our society. It has changed the way that we learn. And, most importantly, it is changing the education systems all around the world. But is this move good or bad? How much digital age did change the education as we know it? And how much more will it change with time? Well, we don't know for sure but we will try to give you an answer to that question. How is digital learning going to change education?

### **Digital technology in educational system**

More and more we can hear about how much technology has entered education systems all around the world. Even the countries with worst education systems have recognized the importance of the digital literacy and they are starting to add computer science as the subject that we must take. But that is not the only thing that has changed. We can more and more see the use of digital technology in the schools, universities etc. Nowadays, if we want to sing up for school or university, we will do it through our home computers or on the spot on specially designed computer stations. That is much faster and cost effective way to process all the applications that university or school could get. But it does not stop there. Pretty much, every classroom has its own smart board which is like a big tablet-like computer on which we can learn, project data, play videos etc. Even the way that school or university keeps our grades in check is now all digital. Far gone are the times when we had a physical book in which was written our names or our grades. Now, even our parents can see our school grades from the comfort of our home which is definitely beneficial for the parents but students probably don't like new addition to the education system. Another great addition that digital age has given us the way to learn much easier than in the past. There is pretty much no more need for physical school books. We all remember how hard it was as a kid to wear the school bag with few pounds of books. But no more. Now some schools have specific talents on which we can find every book that we might need in our school year of semester.

It is pretty much impossible to cheat on a test with the introduction of digital technology in the educational system. In most cases, computer on which we take a test get locked down from any other application or software while we are taking the test. We can only take the test and write the answers in the specific places. Nothing more. Digital technology has also allowed for easier access to the interesting facts and educational materials. Now, we can really show to our professor if he is wrong with just a click of the button. Far gone are the times when we weren't able to show our professors that they are saying something that is factually wrong. Now, we can just show them with ease.

### **Why is digital technology in educational systems a good idea?**

There are many reasons that why is digital technology in educational systems a good idea? Well, it allows for better control and organization of all the data that is related to the education system. We don't have to look through physical books just to find a name of the student and what grades

does that student has. We only need to write the name in the search engine and we will find everything that we need. Also, the access to all the educational data is much easier and much, much faster than ever before. The data which is accessed around the world can also be accessed from the classroom itself. It makes every learning course more interesting not only for the students but for the teachers also.

### **Conclusion**

Ultimately, we have to keep in mind that it is unnecessary and impossible to keep up all the information in everyday life but always be ready to share and participate. Shah (2014) [3] rightly stated that as the teacher and the textbook get replaced by these digital resources of learning, here are many attempts that try and expand the information as well as scope and repertoire of the teacher, firmly believing that installing smart boards and digitally connecting the classrooms is the solution. However, it is obvious to anybody with their ear on the ground that we will need to re-evaluate the role of teacher and construct our education systems, not to be pale imitations of older classrooms as we see in the rise of the massively open online courseware. And the illiteracy after a few years will be counted on the basis of unawareness of computer literacy despite having professional/non-professional degrees and diplomas. Today's students are getting ready to enter a worldwide workforce experiencing a huge digitized change. This move is inciting many schools to change how they consider not just what students need to learn, yet how they ought to learn. Digital change in the classroom can't occur without rapid internet availability. Be that as it may, getting schools online is not without hindrances. The computerized change of training offers many openings to businessmen to grow new devices to help instructors and students. This needs specialised instructors at each phase of improvement. After all, even in the midst of dramatic changes, education has always been and must always be about equipping teachers with the best tools possible to prepare students to be leaders in society and in the marketplace.

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