Era of Digital Education

[1] Nivedita Mohite, [2] Priti Rana

[1]Teacher , [2]Teacher

Sanjeevani World School, Dahisar, Mumbai

Abstract

"I dream of a Digital India where quality education reaches the most inaccessible corners driven Digital learning."

 - Hon. Prime Minister Narendra Modi

Digital learning is a need of an hour. We are in digital era. As an educator now we are dealing with generation Z. Hence we can't separate digital learning from current education system. As the culture of Digital learning spreading across the country learners are finding more efficient ways to acquire knowledge and education.

Digital learning brings revolution in education sector across the globe. Educators are finding new ways with the help of technology to deliver knowledge. On the other hand the huge source of information is available on just one smart click.

India is becoming fastest growing market in digital education industry. Digital learning is most convenient and flexible option. Popularity of online courses is increasing day by day.

According to a report by the UK-India Business Council, India's e-learning sector is expected to grow at a compounded annual rate of 17.4 per cent between 2013 and 2018, twice as fast as the global average. This, along with the government's efforts towards building a digital future for its citizens with the Digital India program, and increased investment on Skill India campaign, is shaping an ecosystem which can foster the seamless inclusion of technology in education.

Introduction

❖ **What is learning?**

Learning is a process in which knowledge acquired through study, experience, or being taught. There is no specific definition.

Learning is an active process. "Learning is the relatively permanent change in a person's knowledge or behavior due to experience. It is never ending process.

❖ **What is Digital learning?**

Digital learning is learning facilitated by technology or instructional practice that gives effective uses of technology. Digital learning is a combination of technology and digital content.

Digital learning is any learning practice which strengthens learning experience of students with the help of technology.

Computer/ web/ internet/electronic/ mobile/ gazette based learning/ training/ education can sum up as online learning or education.

Advantages of Digital learning-

- Personalized learning
- Opportunities
- Collaborative learning
- Quality learning
- Time Location and pacing
- Upgraded content
- Learner's choice
- Teachers, Parents involvement

Key words

Digital education, learning, digital classrooms, collaborative learning, Sanjeevani World School, Artificial Intelligence, Smart phones, learners, educators

Literature Review

- ❖ **Digital learning across the globe –**
- 56% of US K to 12 schools use Computer or laptop as teaching learning equipment.
- 51% Tablet
- 45% Interactive white board
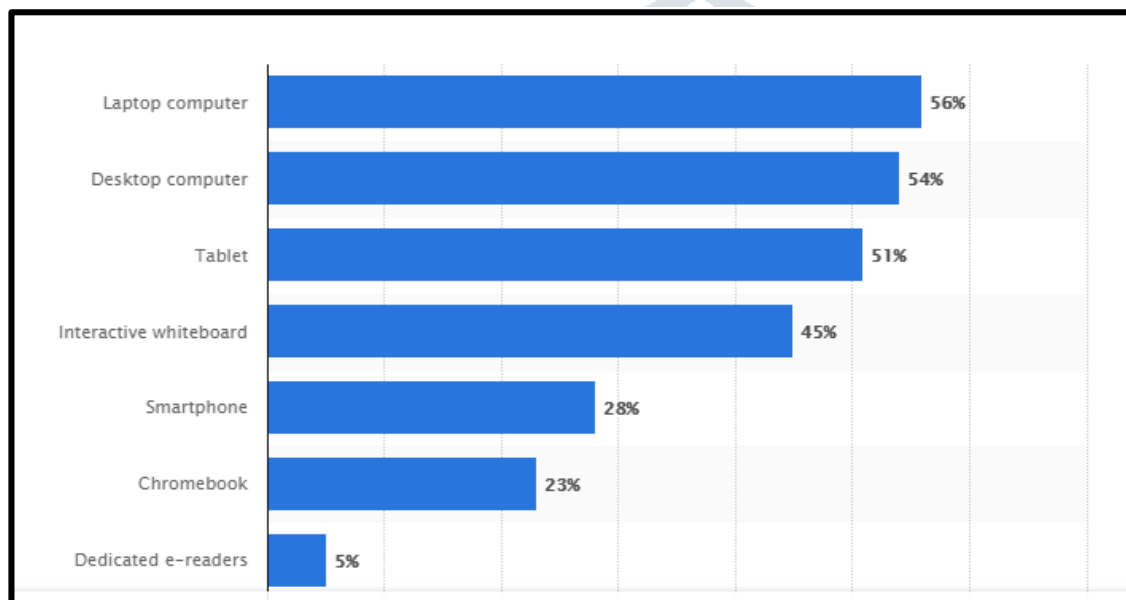- 28% Smart phone

Figure 1 : Weekly use of devices in K to 12 schools in US

https://www.statista.com/statistics/266605/us-digital-education-classroom-devices-weekly-usage/

- ❖ **Digital learning in India**

Online education industry will be a $1.96 billion industry by 2021 according to a research conducted by KPMG, along with insights from Google search. he report titled 'Online Education in India: 2021' highlights the growing influence of the Internet on the education industry in India.

https://economictimes.indiatimes.com/industry/services/education/online-education-will-be-a-2-bn-industry-in-india-by-2021-google-kpmg/articleshow/58913744.cms

Indian education system is magnetized by digital learning. In terms of India digital learning is not future anymore. Digital learning is a prime aspect in Indian education industry. The scenario of Digital learning in India is reassuring. Location, status, language and space are no longer barriers in Indian Education system.

Classrooms

Traditional classrooms

Traditional education is defined as teacher-centered delivery of instruction to classes of students who are the receivers of information. Traditional schools and classrooms generally focuses on reading, writing, speaking, arithmetic, and art craft skills.

Pros	Cons
Socialization: Educators can inculcate social values through various teaching strategies for example: Group studies where learners learn to accept other point of views and discuss the same with their classmates. Learn to resolve and conflicts among the peers.	Cost of commuting: Quality education in colleges and school comes at a very high cost, but digital learning is at a much lower cost and without disturbing the education system can provide a better learning environment for the learner.
Support system: Inculcating new systems of teaching which helps learners with different abilities in day-to-day activities. Where educators acts as a support system.	Strict study hours and timetable: Will restrict development of learners in various fields as they have to be in the campus. E.g.: If learner is good in sports and has to go for various competitions will have to miss regular studies.
Direct interaction and participation: It helps in active learning learners get engaged in one to one interaction and also learn to work collaboratively.	Lack of motivation: Motivation has a great impact on the learning process because learner's progress directly on the motivation given by the educators in the class. If learners are not motivated it affects their overall development.
Daily and occasional events: Learners learn to ask questions and become independent and can complete the given task by their own.	Lack of career direction: May not help to choose the appropriate career and more often have to make choices which are on based on their personal interest.
Responsibility establishments: Help to develop leadership qualities where educators becomes a role model.	Passive learning: Many a times learners are not attentive and do not get engage in the classroom discussion.
Real examples : To prove point educators can demonstrate examples or experiments according to student's needs.	
Teacher centered learning: Learners when work in group with the instructors they learn to communicate with one another.	

Digital classrooms

Digital classrooms allows learners and educators to use technology in most collaborative manner. Basically when we use term 'Digital classroom' we are not thinking of four walls classroom. Digital classroom includes any teaching learning activity supported by internet.

Pros	Cons
More experimental learning: By visualizing learners can create models try out different ways to learn concepts.	Distraction of technology: Learners with lack of skill or knowledge will get distracted. Students may get addicted to online games.
Full participation: As it self-paced it allows flexibility to attend the lectures on their own given time or even on weekends.	No social interactions: There is no one to one interaction and on the spot doubts cannot be solved.
Unlimited resources: Allows learners to explore more and can easily get information on the topic which they want to explore.	Unavailability of equal access of technology: In remote areas lack of connectivity is one of the major concern.
Excitement and fun in learning: Learning can happen easily and with fun as ample amount of resources are available.	Authenticity of available information: As whatever information is given may be valid or not is a question.
Minimization of critical tasks: Technology made our life easy. While studying learners take assistance of technology for critical tasks such as calculating, drawing, analysis etc.	Health factor (Visual, physical and mental health) Student on the phone or most of the time on the tablet will affect their motor skills. Social connectivity becomes minimum which hampers their physical as well as social development. Children in present era having poor eye sight as they restrict themselves from going out and do physical activities where their distance vision gets affected.
Upgraded curriculum: Time to time upgradation is done and learners get the latest information what is around the globe.	

Digital classrooms elements

Technology makes students self-efficient

Digital learning enable students to develop self-efficient learning. It enhances productivity, analytical, critical thinking skills. Gamification is a greatest feature in digital learning. It creates interest amongst learners. Interactive sessions, educational games.

Various digital technologies are used for digital learning such as electronic white boards, desktops and laptops, projectors, smart phones, tablets, IPads etc. … where audio visual aids enhance teaching learning process.

Twitter can be used in a very effective way by sharing various links online sources and can also tweet about new updates. It also helps educator to motivate the learner and can also work on the collaborative assignments. Educators can give surprise for example posting about the upcoming field trips, debate in classroom it will also provide a great way for learners for socializing and helps learner to speak up for the issues they believe in. Learners can get notifications if last moment changes are there as they love to interact on social media.

Artificial Intelligence

What is Artificial Intelligence?

"Artificial Intelligence is likely to be either the best worst thing happen to humanity."

- Stephen Hawking

"Predicting the future is not magic. It is artificial intelligence."

- Dave Waters

'In the field of computer science, Artificial Intelligence is intelligence demonstrated by machines, in contrast to natural or human intelligence.'

Artificial Intelligence is a advancing of technology, with the help of internet which is affecting on humans life. It has a major significance in our lives. Artificial intelligence (AI) traditionally refers to an artificial creation of human-like intelligence that can learn, reason, plan, perceive, or process natural language.

Today most of our activities are impacted by AI. Whether knowingly or unknowingly our choices are also dominated by AI.

Digital learning leads us to Artificial Intelligence.

Uses of Artificial Intelligence

Fraud detection –

Many companies specially banking sector use software based on AI to detect fraud activity. On first step data is given to software to identify fraud activity. Over the period of time these software becomes expert on the base of previous History.

Security –

If we start right from finger print lock or CCTV camera to cyber security we are surrounded by Artificial Intelligence. Especially in computer sector as the chances of cyber-attack is increasing many institutions across the globe are relying on AI for the security of data.

Customer care system –

Mostly every company provides customer care system now a days. Though this system needs man to man interaction most of the work is done by AI based software.

Mobile application:

Smart phones are Artificial Intelligence itself.

Mobile applications are based on AI. Siri by Apple, Google assistant and Google home by Google, Alexa by Amazon are the best examples of AI based applications.

The list of uses of AI can simply go on. Such as -

E commerce

Healthcare

E business

Marketing

Human resource management

Logistics and supply

Betting industry

Self-drive cars

Drone camera

Social media feeds

Music and media streaming services

Video games

And many more….

Sophia – Significant invention

- Sophia is a social humanoid robot. Sophia was activated on 14, 2016.
- It is able to display more than 50 human facial expressions.
- Sophia has been participated in various events and interviews across the globe.
- In November 2017, Sophia was named the United Nations Development Program's first ever innovation champion, and is the first non – human to be given any United Nations title.

Data powered by AI can change how educators and learners find, learn, change, teach, analysis.

- Educators and AI will work in collaborative manner.
- At present AI is integrated part of curriculum. It will affect how learners acquire skills.
- AI can fill gaps in teaching and learning. It can develop efficiency, personalization, understanding and adaptability.
- Universal access for all learners. Global classrooms will be available. The term classroom may change completely.
- Support system and tutoring outside the class.
- Virtual facilitators.
- Assistance in technology and learning

So from broader perspective Artificial Intelligence is a game changer factor in the field of education. So the prominent question is

'Do we really need educators in near future?'

The answer is

'YES, WE DO. NOTHING I REPEAT NOTHING CAN REPLACE AN EDUCATOR.'

Emotional quotient, adversity quotient, creativity, crisis management, authenticity of information will differ educators from Artificial Intelligence.

Have you thought that AI taking over humans?

Artificial Intelligence can pose as an immortal dictator. South Korea is already working on killer robots. That in itself is alarming. Artificial Intelligence is fire. The more you will play the more you will get burn. The ball is in our court.

Sanjeevani World School - Digital support system.

Sanjeevani World School takes pride in integrating technology and values within the curriculum. This is an initiative taken by the school to inculcate values like honesty in the children. 'NO INVIGILATOR ASSESMENT' is one such initiative where exams for higher grades are monitored through surveillance. 'No invigilator' concept is result of Artificial Intelligence.

The school has registered for 'Sustainable Development Goals' that has 17 topics under the UN. This is another drive to go digital and be paper free. Every circular and notification that has to be conveyed to the parents is done through a school app.

Conclusion

Digital learning is the truth of our lives today which is unavoidable and if one wants to live, learn and moves ahead in 21st century world. Digital learning offers great opportunities in education sector and especially for schools as they provide information learning and research.

"Online learning is not the next big thing, it is the now big thing."

- Donna. J.Abernathy

When we talk about human death is imperative

But With AI there is not death

So let's embrace Artificial Intelligence and try to become digitally immortal.

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