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How digitalization can change the Indian education system?

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Abstract

Today, India is one of the world's top destinations for education. With some of the best colleges and universities, it is renowned for its excellence and high standards. What's even more interesting is how technology has advanced rapidly to transform the way students in India consume educational content. Additionally, the penetration of internet-based smart phones is taking quality learning to students across geographies in India.

Today, little children are watching their favorite cartoons and learning pictorial rhymes on the same device. Education is being imparted to them through flexible and non-intrusive formats. As a consequence, students across all age groups are discovering the joys of learning and having fun while at it. There has been a noticeable shift in the perception of parents and teachers view digital learning too. Today, institutions are making efforts to shift the focus back on students to reinvent the way they learn right throughout their life.

India might not have readily adopted education technology but it's heartening to see how a traditional sector like education is using technology as an enabler so far. Today, some cutting-edge technologies are being used to further enhance this sector, while grabbing the attention of entrepreneurs, venture capitalists, corporate and governments.

Keywords: digitalization, Indian education system

Introduction

Innovation and technology have been predominant in every sector in India with each undergoing vast change in the past few years. Technology has made everything much easier and faster, leaving no option for various sectors of the economy but to adapt to change or fear to become obsolete.

In this scenario of digitalization, it is a must for the education sector to also adapt to a dynamic environment as it allows it to keep pace with a competitive world.

For customization

The Western education system in India came into being with the British Raj. However, while the Brits have moved and evolved ways of learning, the Indian education system still lags behind. Teaching is still conducted in archaic classrooms with rigid syllabi dominating the curriculum.

But digitalization offers fluidity to the Indian education sector by being a supplementary form of the system as it is available to students as per their need. While the traditional education system has a uniform approach, EdTech can be customized as per students' requirements. It can be molded as per the student's capability to understand and imbibe any particular subject.

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Adapt to technology

Secondly, as the world is moving towards digitalization India has no option but to keep pace with it. We know that the traditional education system in India is here to stay for the long haul and that no one can take away that learning experience. But our education system needs to be dynamic and needs to adapt to technology.

There is no need to fear a subject like math's as there are fun ways to learn it with the use of EdTech. Today there are apps to learn languages or any other subject. Hence, what is the point in learning a traditional system when there are so many impactful means of learning through digitalization?

Practical Approach

Thirdly, digitalization brings in a more practical approach of tracking students' performance. One can easily evaluate a child's progress by going through his exam scores, attendance, assignments, etc. For instance, one has a choice to choose a tutor, schedule class as per one's time availability and study offline or online as per their convenience.

Time Saver

In today's world where time is money, digitalization is a big time saver. Apart from metros, there are many tier II and tier III cities where transport system is not fully developed. Students have to commute for hours to reach their educational institutes.

In this scenario, a digital course comes as a rescuer to students from even the remotest parts of the country. One just needs to log into a website or switch on their dish TV channel to learn a subject rather than spend long hours in the commute from one spot to another.

Transparency

Lastly, digitalization offers a safe mode of learning which is transparent and accountable. Parents can keep a track of their wards' progress by logging into the website.

It also offers them a platform to air their views and suggestions which can be used to improve the system, unlike the traditional method where one has to be quiet fearing reprimand from the teacher. Digitalization help in creating a solid partnership between parents and teachers with one goal in mind - better learning for students.

Here are the factors that are enabling the growth of digital education

1. Personalized and adaptive learning

Learning platforms, software's and digital devices are together creating countless new ways to modify education. This way, the academic potential, strengths, weaknesses, aptitude and learning pace of every single student is catered to. Precise, mobile and reliable applications are being created to teach students, help them practice their learnings, take assignments and manage their schedules.

Schools are now providing their students with digital devices like desktop computers, laptops and tablets. These devices are aiding them in the teaching process while also helping them understand how students learn and how to enhance their learning process.

The 'one size fits all' teaching model is being supplemented by adaptive, personalized learning pedagogies. Going forward, this will be the new trend in formal learning that

will enable students to be technologically skilled and equipped for modern workplaces.

2. Two-way conversations in E-Learning

In the traditional classroom seating scenario, students are unable to get the individual attention they need due to time constraints. In contrast, the one-to-one context of learning in digital mediums currently students to learn through videos and chat with an expert.

The upcoming 'Learning Management System' will continue the two-way communication model between students and experts. More importantly, it will let students track their coursework progress, identify improvement areas and offer ways to make the most of them.

Through the help of 'Big Data', experts will be able to capture student feedback within the framework of the content provided. With this alone, they'll be able to improvise and enhance their offerings in new ways to further benefit students.

3. Mobile-based learning

Over the past few years, mobile learning has picked up by the populace who have gradually assimilated it in their lives. It has offered students the flexibility to access educational content seamlessly across multiple digital devices like desktops, laptops, tablets and smartphones.

The smartphone user base in India continues to increase, in both urban and rural areas. The coming years will witness users accessing most of their educational content through internet powered smartphones in a massive way. Most educational content, including even online courses, will be optimized entirely for mobile devices.

4. Video-based learning

Video learning has always appealed to students since it closely mirrors the traditional classroom teaching style. Earlier, students watched video lectures as a form of homework and then discussed them during the next class. Over time, this habit brought about a remarkable improvement in their performance, with a noticeable improvement in grades.

Video lectures allowed students to learn subject syllabi at their own pace and dedicate time spent in class towards interactions. This will continue to be a trend in the future where students will have access to rich and interactive content, that will be useful for both formal training as well as performance enhancement. The increase in video-based learning on mobile devices will eventually account for 80 per cent of all internet traffic by 2019.

5. Open educational resources

Open digital education resources have commonly been used in distance learning courses. They consist of freely accessible media for learning, teaching and research purposes. They are licensed to be revised and disseminated freely by teachers among students. This allows the latter to gain access to an extensive arrive of study material that is otherwise restricted indigenously.

Open educational resources also facilitate the creation of a flexible environment where teachers can customize educational content for individual sessions or classroom sittings. This is applicable for typical curricular subjects like mathematics, sciences and languages, as well as business and fine arts.

6. Usage of Virtual Reality (VR) and Augmented Reality (AR) for learning

Virtual Reality and Augmented Reality are already buzzwords in the technology space. Their advent in e-learning has massively impacted the efficiency with which it is offered to students and the way it assesses their performance.

VR allows students using e-learning platforms on mobile devices to directly interact with study material. This keeps their engagement levels high and motivates them to learn more and better. On the other hand, AR facilitates teachers and trainers in performing tasks, they previously haven't or cannot, in a safe environment.

Together, the both of them are engaging students in ways like never before and are poised to become a lot more widespread in their usage and impact in the future.

Conclusion

We might state that modern educational system faces creative crisis. Class work and lessons do not contribute to students' personal initiatives to learn something new, establish objective connection between their knowledge and the real world, use their imagination to look for nonstandard answers to standard questions instead of using stereotypic models. Therefore the classroom of the future should not be a place of knowledge transfer, but a place of investing in the mind of students, focusing on creativity and innovation and not on repeating ready-made opinions or mechanical response to test questions. The stated approach to education will force us to reconsider curricula and integration of conceptual and actual innovations. New curricula should stipulate not only obligatory transfer of facts, but focus on students' reaching certain objectives, namely creativity, imagination and teamwork irrespective of team members' location. Finally, it should be noted that today's global education has faced major transformations, caused by further integration of new digital technologies in academic activity and is actively searching for efficient implementation models, which will compromise with traditions and innovations.

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