Digitization of education: Great change in teaching-learning trends

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Abstract

Technology has made imparting education stress-free for both students and educators. Schools are gradually implementing digital teaching solutions to involve with a generation of learners familiar with the likes of PlayStations and iPads and trying to make the classroom atmosphere more broad and participatory. Information and communication technology in education has facilitated student understanding, students are perhaps the most ready and exposed to external education but they are in the best situation to absorb what comes up in the classroom. Currently students live in a world that is constantly linked and alive outside the class room, so traditional methods won’t work now.

Keywords: Digitization, Teaching-Learning Trends

Introduction

“The use of technology coupled with bold decisions can help India leapfrog into inclusive growth and improve the quality of health and education.”

Bill Gates.

The true revolution in education can only be achieved via digitization of education so that students can learn at their own speed both within and outside the classroom. Their learning upgrades while they carry on to advantage from fostering, mentorship and direction of their teachers. Various teachers are ready to accept the wave of digitization but more effort still need to be exercised when it comes to teacher training. Outmoded teaching methods need to meet with 21st century teaching and learning trends. By getting digitalize, the material has the power to involve students in methods that aren’t possible with stationary pages. Educators who have expressed that difficulty in engaging students is one of the major tests of their jobs, have described the feeling of joy when they see, something click in a student’s eyes.

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

1. Personalised 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 learning’s, 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 smart phones. 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 Smartphone's 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 settings. 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.

Advantages
- Digital education has certain distinct advantages. Firstly, its reach and accessibility allow it to permeate to a much larger segment of the society which would have otherwise remain deprived. This alone would enable the woefully overstretched education system to keep pace with the growing needs and aspirations of an increasingly urbanizing society
- Secondly, the 24x7 access to lessons and the self-taught construct allows students flexible learning times and pursue education alongside other commitments
- Thirdly, uniform content and learning packages will ensure uniformity of knowledge dissemination and eliminate vastly varying standards between good and better institutions. With hand held internet devices available with most students, the engagement with teachers would extend well beyond conventional school timings
- Digital education also promotes minimizing infrastructure and maximizing outcomes, significantly reducing the costs of education and making it more affordable

References