Teaching, Teachers & Technology in Pandemic Times

Technology led paradigm shift in teaching during the pandemic and beyond

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Unprecedented times lead to unprecedented challenges. As the pandemic unfolds in human history as never before, all aspects of human connections and social interactions are being redefined. Education, as the very foundation of a progressive society, is at an interesting cusp. Where the education sector has been slow to adapt to the advances in technology, the pandemic has opened the doors to accelerate the much-needed overhaul needed by **educational institutions.**

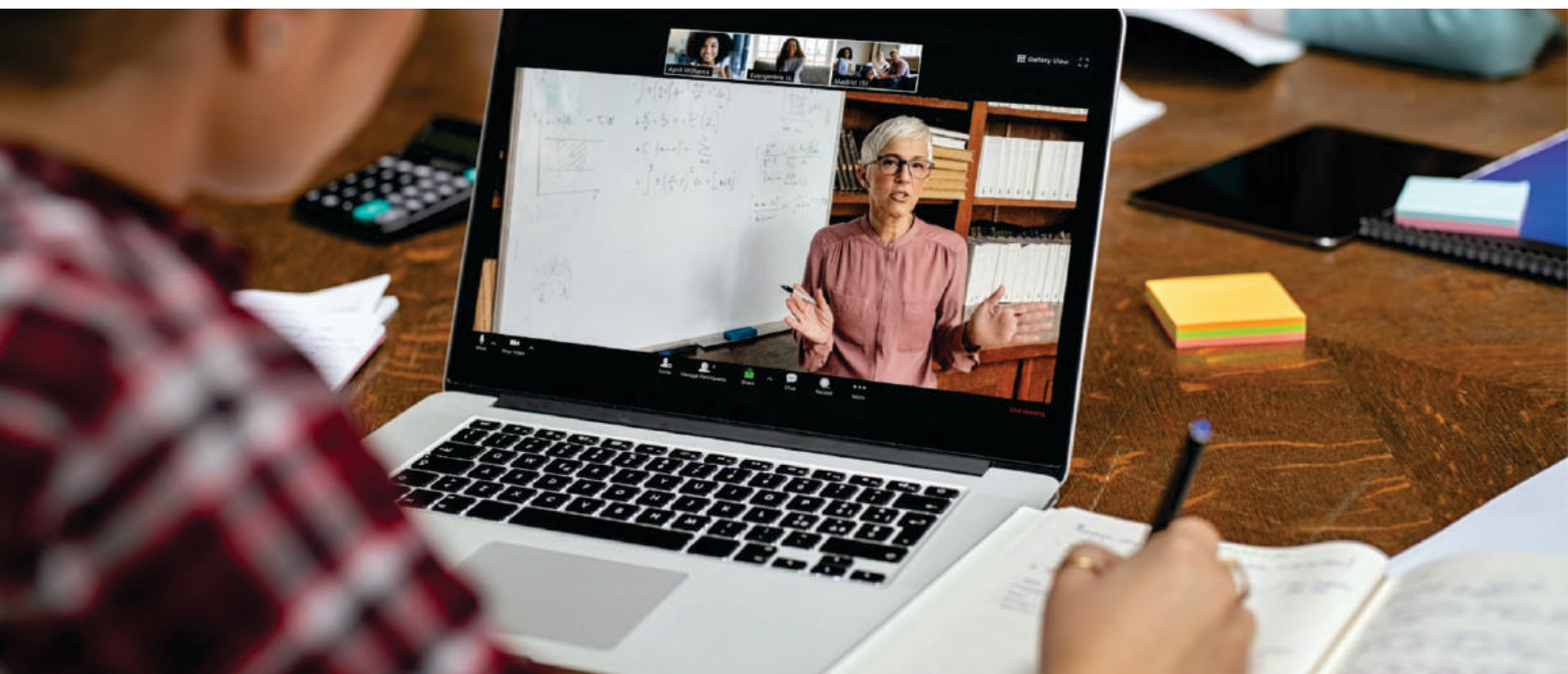# Digitally disruptive chat rooms turn into classrooms

Remote learning is a huge disruption during the pandemic times and an abrupt change to adapt for many. But most of the schools have transitioned and digitally transformed quickly with the right tools and technology. **Online tutoring** and **digital classes** with collaborative tools such as Zoom are already passe. Software solutions custom-built for teacher-student interactions have been fast replacing the **traditional classroom**. Not only can teachers use collaborative teaching tools for **remote work**, but they can also actually deliver much more.

Due to the interconnected global world, geographical boundaries are no limitations. The classrooms can now incorporate students and teachers from anywhere in the world, and this throws up huge opportunities for educational business growth and footprint impact.

Beyond just the virtual class - an all-encompassing intelligent ecosystem

A digital **Learning Management System (LMS)** is a comprehensive platform to curate, collaborate, and connect the learners and the teachers. The power of connectivity means that all modes of tutoring as well as live lectures can be recorded for future **video education** content that can be reused again and again. The student can also revisit the lecture at ease if needed. It is a two-way system, augmented by **digital-based assessments.**

The tech-savvy generation of today has short-lived attention spans and is also a consumer hungry for more. With the lines blurring between the traditional streams, technology can support a seamless and holistic approach towards a wholesome education, one that amalgamates the essential life-skills with the deeper theories of academia. **Artificial Intelligence** (https://techmindsllc.com/project-services/artificial-intelligence-and-iot/ has opened up a plethora of options. 'One size fits all' does not work anymore. It is now possible to set up self-paced learning for every individual.

In fact, the whole curricula can be customized, and that too automatically. The deep learning capabilities of intelligent algorithms can enhance the learning experience as the content is delivered to each student based on individual understanding and performance.

Collaborative learning is intrinsically interactive

Teaching has acquired a whole new meaning with interesting arenas such as online chat rooms. Solutions such as **Blackboard Collaborate: web conferencing/webinar platform** facilitate the existence of interactive academic conferences and healthy group discussions that invite participation and hence promote collaborative questioning and learning.

Personalized teacher anytime, anywhere

Going a step further, exciting new virtual teacher assistants and in fact, complete digital teachers with no human counterparts are now the new kids on the block.

AI-driven chatbots (https://techmindsllc.com/platforms/cognitive-services/)can quickly learn a student's intent, and backed by NLP, they can be built as plain vanilla bots or as more sophisticated avatars. Besides delivering basic lectures, this virtual teacher never tires and can be scaled up to as many clones as needed, playing out the lesson to as many students concurrently/individually over and over again.

Content created in one language can be delivered in multiple languages, catering to the multilingual student diaspora from all across the world, powered by automated NLP and translation software. As a virtual expert and the personal assistant of a student, such a chatbot could become a study mentor, guiding and helping the learner develop concepts across a gamut of topics and subjects. Such **technology governance** of the student can free up human teacher time from repetitive tasks, maybe to infuse more time investment in research and thereby enhancing the quality of the content itself.

Immersive, entertaining, and engaging

Learning is no longer mundane, it is immersive and can be entertaining as well. With the inclusion of innovations such as **virtual reality** and **augmented reality**, the classroom experience can be transformed completely. Exploration and practice can change the way a student learns, involving all the senses of visual, sound, and imagination to motivate and engage a learner. It can be a great aid to **inclusive education, transcending barriers for the differently-abled, and those with learning impairments, promoting happy learners.**
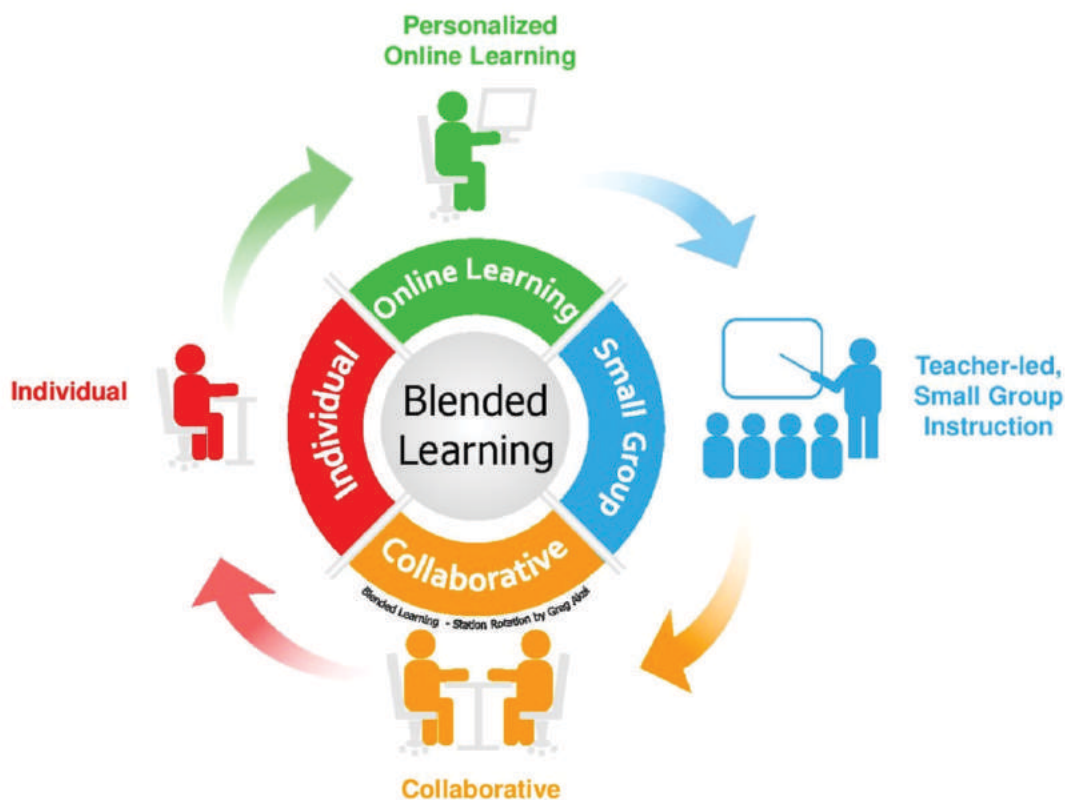
Stories can be built and narrated in interactive ways with the use of AR/VR, such that students and teachers both enjoy the new ways of imparting knowledge. Interactive video technology can take the learning to a whole new level, gamification can further make it engaging for the new-age learners. Visuals have a higher retention and recall value, and hence such content is invaluable if bundled with academic concepts. Lines between fun, play, and teaching begin to blur with such amalgamations, all for the benefit of the students.

Every object can be connected in the IoT world

The trending technology of IoT is like an armed toolkit for a connected classroom. A number of **academic programs in IoT** are now focusing on the education sector. From smart cameras, smart classrooms, smart pens, pencils, and digital pads, all can be connected via an IoT platform. Editable books can be scanned from physical media via IoT, for instance. The gaming experience-based learning can be delivered to multiple devices by using IoT. Blackboards can be connected to the backbone of digital content and use interactive media for learning.

Industry leaders in technology for education

Microsoft is creating waves in tech-based education to nurture learning systems that focus both on students and teachers. The framework creates a rich and secure platform as an engaging, insight-based, efficient digital infrastructure that can connect devices, apps, and resources for **Hybrid, Blended and Online Learning (HBO).**

Microsoft Teams is a digital hub that brings conversations, content, and apps together in one place. Educators can create **collaborative classrooms**, connect in professional learning communities, and communicate with school staff – all from a single experience in **Office 365 Education**. **Microsoft Teams** operates on the belief that effective classroom technology is digital advancement delivered with purpose – to inspire creativity and cultivate curiosity. The classroom experience in Teams empowers the generation that embraces technology as their first language, encouraging their developing voices and helping educators implement learning strategies for their future success.

Techminds is a **Microsoft Authorized Education Partner** (https://techmindsllc.com/industries/education/) that is delivering state-of-the-art solutions in the EdTech space. Backed with unparalleled tools like Microsoft's leading **cognitive services**, our team comprises of expert **Azure developers** for custom-built software. Using the robust **APIs** that integrate with plug-n-play components, we can help arrive at tailor-made solutions for the education sector. Our offerings span applications that are device-agnostic and can cater to legacy systems for a smooth transition and a holistic business solution. Techminds shares a long-term view of digital transformation with education providers.

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