TECHNOLOGY ENHANCED LEARNING

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Abstract:

Technology is evolving incredibly fast, new trends are appearing and, also, the expectations of all Characters (i.e., teachers and learners) are changing. TEL is helping to develop new teaching methodologies, yet technology is not the only resource to foster students' knowledge. The intended technology should be examined based on the pedagogical necessity and integrated into education models. Because of this understanding, this thematic series mainly focuses on disseminating learning experiences and critical studies enhanced by technology and not compelled by the use of technology. Information and Communication Technologies (ICT) have been introduced to enhance the way the teaching process is undertaken. Utilizing ICT in education, or in other words, Technology Enhanced Learning (TEL), can make easy efficient e-learning models where technology helps learners to build their knowledge and develop competencies. Online learning is continuously promoting new methodologies for learning by using technology as a cornerstone for this type of development and performance.

Keywords: *Information and Communication Technologies (ICT), Technology Enhanced Learning (TEL),E-learning models.*

Introduction:

E-learning appeared many years ago in a way totally different we face today. We can start explaining that the first e-learning course was by correspondence in 1840 by Isaac Pitman or the first testing machine in 1924, but for this thematic series, it is better to start in the digital era where delivery methods and tools were improved with web-based communication technologies. Gerstein (2014) defines this new era as Education 3.0 where "Education 3.0 recognizes that each educator's and student's journey is unique, personalized, and self-determined". Other experts expect that education will change work contexts with the fourth industrial revolution (World Economic Forum, 2017). In any case,

technology is playing a crucial role in this era and looking at the education as never has been seen before. This change impacts all types of education levels, from elementary to higher education, but nowadays the impact in the economy and society is expected in higher education. Universities are preparing students for an uncertain future with new jobs needs, and they have to respond to this new challenge with the support of technology. Better education environment spaces, better tools to communicate, better tools to practice skills, or better tools to support teacher's work. These are some examples of where technology can impact. Thus, technology has not to be seen as a sustaining factor of the current learning methodologies, it has to be seen as a

disruptive factor to reinforce the new economy and industry.

Innovative teaching Benefits in higher education:

1. Learning through Interactivity:

The adoption of E-Learning is unlocking a whole new way of learning. Education providers can build interactivity into educational resources. The introduction of quizzes, problem-solving games, notes, and related links can encourage active learning experiences. For instance, traditionally, the only way a student could learn Newton's Laws of Motion was by attending a physical classroom where the teacher explained the concepts. Today, the student can watch animated videos which demonstrate the laws in action. They can do an online assignment to demonstrate what they learned and then take a quiz after the lesson to test their knowledge.

Hence, learning has become a much more engaging, visual, and addictive experience. Teachers become facilitators who nudge learners to the right resources, address more complex queries, and track student progress.

2. The Shift from Physical to E-Textbooks:

One of the most popular modern teaching approaches is the introduction of e-PUB format e-Books, which enable many useful functionalities missing from paper books and PDF eBooks.

For instance, learners can make notes, interact with teachers and fellow learners through features such as highlights, and engage with multimedia elements such as videos, audio presentations, and info graphics. Hyperlinks to content located outside the scope of the E-Text book further connect the dots and expose students to related historic and real-time events and additional resources that enhance their understanding of a subject.

By 2023, the E-Books market is expected to grow of $19.95 billion in 2022, with education among the top three verticals. A key driver of this trend is the growing usage of mobile phones.

3. Learning Skills Via Live Simulations:

While it's important for learners to build knowledge, it is just as important to build skills to be competitive in today's work world. One of the innovative ways in which education providers are in this is true immersive learning. Educators design a live simulated environment where learners engage in real-time to solve problems. For instance, learners can strengthen coding skills in a live environment. Group simulations are also possible, enabling learners to build team skills, which is an in-demand skill in the workplace.

4. Focus on Accessible Education:

One of the biggest value-adds through eLearning is the ability to build accessible education for a wide spectrum of learners with diverse needs. Teachers, on their own, cannot provide accessible education to learners with diverse needs. This is where cutting-edge digital publishing platforms enable course creators to design the same content in a way that makes it easy for special needs, mobility challenges, and geographical and language barriers to access with ease. Simply put, learning is accessible to every learner in a way that is most relevant to them. Here's an example. If a learner has a hearing challenge, they can learn by watching videos with subtitles, consuming info graphics, reading E-Books, and attending live instructor-led video conferences with caption capabilities, online. However, in a physical classroom, they would need the help of a sign language interpreter to keep pace, as all sessions are instructor-led.

5. Higher Measurability of Learning Effectiveness:

Data-driven learning is an important value-add of eLearning, especially when delivered with the right technology. Today, educators can review extensive data, which offers insights into learner habits, behavior, challenges, and limitations. They can also customize dashboards and receive diverse data sets for a holistic understanding of learner effectiveness. They can determine whether or not resources are working and

enhance curriculum and learning methodologies accordingly.

6. Leverage a Single, Unified Platform:

One of the top contemporary education technology trends is the introduction of a single, unified platform that enables all stakeholders – learners, teachers, and guest lecturers – to engage via one interface. This approach helps educators streamline the entire teaching and learning process by enabling learners to access on-demand learning resources, attend live instructor-led sessions, collaborate and submit assignments, and track progress from one location. On the other hand, education providers can share resources, host activities, and measure learning progress, from the same platform.

The Future of Education:

E-Learning is no doubt the future of education. However, it is important to design courses and content in such a way that is effective and not overwhelming for learners. At times, education providers can overtly focus on bringing elements like multimedia content, virtual reality simulations, and other interactive pillars to content while losing sight of learning effectiveness. This is where measuring learning effectiveness and taking data-driven content development and distribution decisions are key to the success of contemporary eLearning.

Conclusion:

Smart usage of technology can help education providers and online learning platforms for higher education upgrade their teaching and learning methodologies. One of the best approaches is to partner with a seasoned digital technology specialist to set up the infrastructure and tools to transform learning outcomes. Access to such a framework creates more bandwidth for educators who can play a deeper role in learning facilitation, innovative pedagogy, and tracking learner progress.

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