

## INTEGRATION OF TECHNOLOGY INTO PEDAGOGICAL PRACTICES

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### **ABSTRACT**

*There are indications that the field of educational technology is gearing up to begin foundation work of the kind is so essential. Recent articles written by Roblyer serve both as an acknowledgement of past failures and a rallying exclamation for new attacks on the problem of providing a sound research base for technology in teaching. The field is beginning to resound with the call for a new educational technology research agenda—one that focuses on capturing the unique impact of technology-enhanced instructional designs, rather than of the digital technologies, themselves. Educational technology is intended to improve education for the 21st century learner. Students today are considered "Digital Natives" who were born and raised in a digital environment and inherently think different because of this exposure to technology.*

**KEYWORDS:** *Educational Technology, Teaching-Learning Process, Instructional Designs, Experiential Learning*

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### **INTRODUCTION**

Pandemic has opened the doors to teachers to learn and use the technology in different angle. Teachers have used for the first time to teach a lesson online. He /She got an opportunity to provide so much of content through in an innovative manner. They shared podcasts and videos with the students. In general, most of the teachers' limit their teaching with power point presentations or restrict them to use chalk and talk. Now the teachers can make use of the social media as medium to teach Communication Skills. Today every one of us is technically sound and make use of it while engaging the students. Time is utilized properly and much is delivered.

Tom Whitby, in one of his articles "Learning without Technology, wrote "If we are educating our children to live and thrive in their world, we cannot limit them to what we were limited to in our world. As things change and evolve, so must education. As educators we have a professional obligation to change as well. We must retain a sense of relevance and that requires effort. Relevance does not come to us as we sleep in the night. Educators need to employ the very skills they are passing along to their students. They need to: curate, collaborate, communicate, critically think, and create. All of this is best accomplished through the use of tools of technology. An education without technology does not prepare our students with the skills that their world will require. Technology should be ubiquitous in education."

When students are using technology as a tool or a support for communicating with others, they are in an active role rather than the passive role of recipient of information transmitted by a teacher, textbook, or broadcast. The student is actively making choices about how to generate, obtain, manipulate, or display information. Technology use allows many more students to be actively thinking about information, making choices, and executing skills than is typical in teacher-led

lessons. Moreover, when technology is used as a tool to support students in performing authentic tasks, the students are in the position of defining their goals, making design decisions, and evaluating their progress. Using technology in the classroom is no longer only about including pictures and sounds in the presentations a teacher prepares. For the best learning experience, you have to provide students with hands-on experience in the use of tools that enable them to learn effectively from educational software and the Internet. Technology infuses classrooms with digital learning tools, such as computers and hand held devices; expands course offerings, experiences, and learning materials; supports learning 24 hours a day, 7 days a week; builds 21st century skills; increases student engagement and motivation; and accelerates learning. Technology also has the power to transform teaching by ushering in a new model of connected teaching. This model links teachers to their students and to professional content, resources, and systems to help them improve their own instruction and personalize learning.

### **Educational Technology**

The term educational technology is often related with, and comprehends, instructional theory and learning theory. Educational technology includes, but is not limited to, software, hardware, as well as Internet applications, such as wiki's and blogs, and activities." (Wikipedia) Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources."

### **Instructional Design**

It is the process by which learning tools and experiences are premeditated, developed and delivered. These learning products include online courses, instructional manuals, video tutorials, etc. It analyses the learning needs and develop the instruction through instructional technology, which helps in developing the method to give instruction. The method facilitates to transfer the knowledge, skills and attitudes systematically to the receiver.

While designing the instruction, the teacher can make use of any of the ICT tools mentioned above to make an interactive session. He can reassure the students to give online presentations and encourage him to be camera ready, which will boost his confidence while giving virtual interviews.

ICT tools help to prepare collaborative documents, propose activities that encourage students participation

The teachers can make use of the following ICT tools while designing their instruction:

### **Genially**

Excellent for creating different content in which interactivity and information are highly valued. Perfect for classroom use to explain the entire lesson full lessons with a single image.

### **Microsoft Teams**

The perfect tool to bring all your content together in one place. It encourages collaborative work.. Create teams in each classroom where class jobs are shared, assignments are given out, and other participants have an option to chat

### **Kahoot**

Allows you to create quizzes that serve to test students' knowledge or review content that has already been worked on in the classroom. There are four types of tests: contest, puzzle, debate, and survey. Games can be projected on a screen, making the entire class participate and having students respond from their computers or mobile devices.

### **Dropbox**

Helps to store the files, documents images and presentations. It even allows to synchronize folders with classmates. It provides an option for giving feedback and anyone can access it from different devices.

### **We Transfer**

Ideal for exchanging files. Without having to be registered to an account, you can send files that do not exceed 20 GB, which really allows for professional use..

Visual.ly : create and view infographics. In addition, it allows you to share the content you've created on social networks.

Thanks to the technology implemented classrooms wherein students improve their knowledge and teachers reduce their working time, as they are able to focus on teaching.

### **Experiential Learning**

Experiential Learning implies learning from experience. David Kolb, a renowned psychologist was behind this theory. According to him, "this is a learning process where knowledge is created through the transformation of experience". This is a holistic theory, which emphasizes how experiences including cognitive and environmental factors as well as emotions influence the process of learning. Teachers should focus on the physical, emotional and intellectual growth of their students and should encourage them to experiment and think independently. It encourages students to learn by collaboration and participation and students become very engaged when they use a real-life method of learning. Experiential teachers should be such that they are able to create opportunities for reflection on learning experiences to apply them to future learning. Research is indicative of the fact that technology can be used to enhance experiential learning in three ways:

- Recording the experience and referring to it later
- Creating a virtual community of participants like students and teachers
- Enabling new avenues for the community to reach its goal

For effective experiential learning, technology should be utilized in a responsible manner. There are a number of available technologies to realize these outcomes. One of which is the use of online learning communities to link students with workplaces and to establish communities of professional practice. The technology roles for experiential learning should include:

- Technology should provide tools to support knowledge construction
- It should be the information driver to explore knowledge to support learning by constructing
- It should be the basis of learning by doing
- It should be the social medium to support learning by conversing
- It should also support learning by reflecting

Teachers can guide the students in experiential teaching with the help of technology are:

- Incorporate social learning and interaction into online learning
- Incorporate social learning and interaction into online learning
- Make students' complete specific assignments using technology
- Use technology that employs sensory input
- Use technology that employs sensory input
- Facilitate collaboration

### **Blended Learning**

Teachers must be aware of their students' motivators in order to successfully implement technology into the classroom. Students are more motivated to learn when they are interested in the subject matter, which can be enhanced by using technologies in the classroom and targeting the need for screens and digital material that they have been stimulated by outside of the classroom. Blended learning opportunities incorporate both face-to-face and online learning opportunities. The degree to which online learning takes place, and the way it is integrated into the curriculum, can vary across institutions. The strategy of blending online learning with institutional-based instruction is often utilized to accommodate students' diverse learning styles and to enable them to work before or after college in ways that are not possible with full-time conventional classroom instruction. Online learning has the potential to improve educational productivity by accelerating the rate of learning, taking advantage of learning time outside of school hours, reducing the cost of instructional materials, and better utilizing teacher time. These strategies can be particularly useful in rural areas where blended or online learning can help teachers and students in remote areas overcome distance.

According to study, 70.3% of Indian family households have access to the internet. This allows students to access course material at home and engage with the numerous online resources available to them. Students can use their home computers and internet to conduct research, participate in social media, email, and play educational games and stream videos. The technology enabled new learning help the students to widen their knowledge.

Using online resources such as Khan Academy Talks, Biju's, can help students spend more time on specific aspects of what they may be learning in class, but at home. These online lessons allow for students who might need extra help to understand materials outside of the classroom. These tutorials can focus on small concepts of large ideas taught in class, or the other way around. The institutions are advised to arrange webinars on various topics to enhance learning.

### **Learning Outcomes**

- The learning outcomes and relevant pedagogical approach always come first. Then we explore with the teachers which technology solutions could help achieve those objectives and goals, and what support they need in order to feel sufficiently comfortable to implement them.
- To help teachers integrate technology more effectively into their teaching, professional development around educational technology should be a higher priority for schools and districts, and it needs to be ongoing and collaborative. Professional development on educational technology should focus on what students need to learn, rather than on how to use a specific device.

- The role of teacher would be to ignite this excitement and create commitment and various opportunities in classroom again with the help of technology wherever needed.

## CONCLUSION

Learning that is restricted to the four walls of a classroom cannot prove to be very effective. There is a need to connect classrooms to the world outside to realize the true potential of learning and make it effective. Connecting our students to the world has great educational potential. It helps them learn by making connections across geographic, socio-economic and cultural boundaries. It is a powerful way to encourage them to think beyond their own societal and cultural norms and consider the world from another perspective. Extending the reach of a classroom by connecting it to the world is made easy with the help of technology: Class Blogs, Video Conferencing, Edmodo, etc. The Internet has revolutionized the way communication happens. With e-mail, social networks, video conferencing and more people can be more connected than ever before and so can classrooms.

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