



Integration Of Technology For Better Teaching And Learning

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Abstract

The integrating technology into both teaching and learning is an integral part of today's educational system. This aspect focuses on the increasing demands for the application of technology in the classroom while also maintaining a focus on the subject matter and the manner in which it is taught. However, current educators and those who will become educators in the future need to study the role that technology-mediated pedagogies play in the realization of sustainable education. The development of relevant skills ought to be the primary objective of any education programme pertaining to sustainable practices. Because of COVID-19, all of the teachers are now doing their classes online. Despite this, the transition could not be completed in a single or even a couple of days. It is possible to learn, but it is more necessary to understand how to embed pedagogical skills in technology for the long-term growth of the students who are learning it. This is the primary reason why the researcher decided to focus their attention on this particular subject area for the purpose of advancing the integration of technology in educational settings. As a result, it not only prepares the educational system for the future but also prepares the students for a more successful future.

Key Words: Integration, Technology, Teaching and Learning.

INTRODUCTION

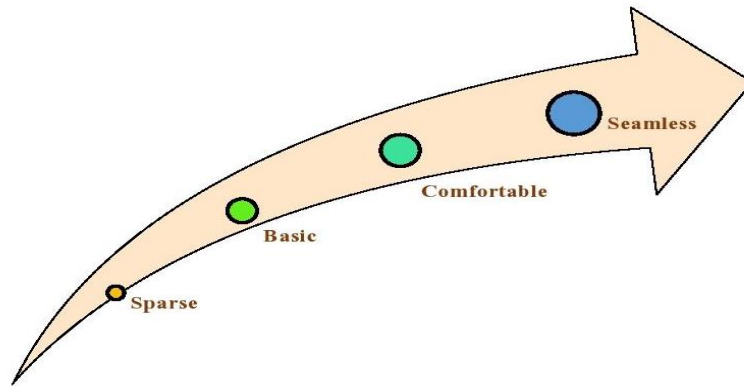
People have to engage in themselves through their lives by learning and acquiring new skills. In order to be able to control one's own life, one must first develop the skills of self-awareness and self-reflection, which allow one to modify one's own emotional experiences, urges, or abilities.

NEED OF INTEGRATING TECHNOLOGY IN TEACHING AND LEARNING

Technology in education refers to the practise of utilising technological means to accomplish pedagogical goals. Despite the fact that technology plays a significant role in our daily lives, most academic institutions are still lagging when it comes to integrating it into the classroom. Where used openly and consistently, and when innovation supports curricular goals, technological integration yields positive results. Technology aids in achieving both

curricular and overarching goals, and it facilitates the achievement of these goals by students.

There are four levels of Technology Integration:



There are the following ways to use technology to create an enriched learning environment:

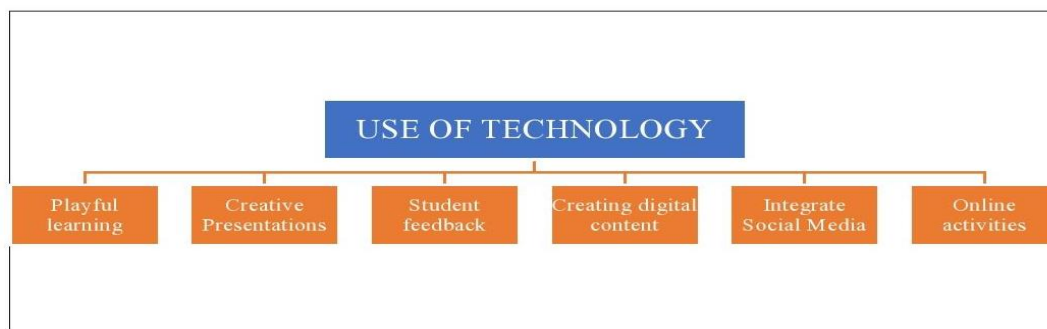


Fig 1: Use of Technology

Good online education is equally effective as good face-to-face teaching. To be successful, online teachers must adjust their facilitation techniques to their students' needs. Different online teaching modes may have different techniques and degrees of "unlikeness." Fully online teaching does not always mean using the same teaching technique and curriculum as face-to-face teaching. In some circumstances, this is difficult or inappropriate.

Oral and written presentations, which are common in face-to-face teaching, would be challenging in an online course.

Ko and Rossen (2004) note that going online allows you to try fresh methods and approaches. Keeping your course's quality high doesn't mean recreating the past.

Techniques vary within the same online mode. There's no single answer to what makes online instruction successful. Several basic concepts can be used to make integration effective and assist student learning.

Face-to-face learning environments aren't available 24/7 like online learning environments. Students may assume the teacher is always available in an asynchronous online learning environment. As a teacher, you must determine when you'll be available to students. Online tutorials with synchronous needs can be scheduled. You should also set an expectation for how quickly you will reply to messages so learners know if they contact you after a certain hour in the evening, they should expect a response the next morning. Students should be given a timetable of expectations - inform them when they should have finished each course milestone and follow up if they skip the deadline. This could help less-motivated students stay on track.

Creating a sense of belonging in the community

Online students may feel isolated. Students need a strong online learning community ASAP. Wenger (1998) says that persons with the same goal can form a community of practice to share ideas and experiences. The members of a community, such as teachers, discuss their opinions and experiences online. Active participation in a community is a social process, but it may also help people learn about themselves and their surroundings, as well as grow their social network and obtain recognition.

Because of the nature of online engagement, online learners might easily become disengaged or isolated. Consider how you can keep them together and engaged. This can involve reminding them what they should be focusing on or building a sense of community by being a major member of the group.

Because students may access the content on their own, you may spend less time with them during lectures or traditional sessions. In an online environment, teachers can be more helpful and active, ensuring that students understand their primary purpose is to complete the course successfully. Develop a personal contact with each learner rather than relying on mass or automated email.

Inform and update students.

This compels you to frequently repeat deadline information. In the weeks and days before synchronous learning activities (such as webinars and group tutorials), remind learners many times. Any modifications to scheduled activities, such as your absence and inability to respond for several days, should be reported in advance. You should also select an emergency contact for learners.

Comments

During the course, you must frequently check on the learners to see how they're doing, evaluate their progress, and ensure they're getting enough help. Those that respond poorly or not at all will need your help to develop learning approaches that will boost their performance. Online feedback tools offer teachers more formative feedback than paper questionnaires (Donovan et al., 2006). Peer observation with other online teachers with comparable interests can also be beneficial (Jones & Gallen, 2016).

Communicating with pupils in mind

After developing a facilitation technique, talk with your students regarding online instruction. This is especially important for first-time online students. As a teacher, you must communicate with students about online learning, communication protocol, assignment submission, general navigation, and specialised tools or software, as well as present samples of high-quality student work and relevant resources.

Selecting teaching tools

Technology provides the platform for online education, and good online teaching involves using technology appropriately. Some teachers favour a high level of technology use, while others prefer a minimal level. Uncomfortable teachers should try one tool at a time. A mixed-online discussion board is a great place to start. Other teachers may be more confident and incorporate more technology. Using technology should always be founded on pedagogical ideas. You must implement technology in the classroom for the students' learning.

Online course accessibility

As a teacher, make sure pupils receive course materials. Online students get access to academics and technology.

Online components of your course should be accessible to students, both in terms of file size and download rates, and in terms of providing alternate means to access content as needed.

Respect diversity

Students can learn at their own speed and in their preferred style online. This appeals to folks with other obligations or jobs. Avoid limiting students' online learning liberties by creating unnecessary rules.

How do you integrate classroom technology?

Students don't need their own tablets or PCs to use new technologies, despite prevalent misconceptions. Whole-class technology can aid auditory and visual learners. Low-cost, user-friendly tools Power Points, games, online homework, and online grading systems can help students progress.

PowerPoints, games included

PowerPoint presentations can be used to introduce a topic in class and engage pupils. The slides can include visuals and links to related videos.

Kahoot can be used to review topics after a course or unit. Teachers and students can exchange Kahoots. Students who are hesitant to speak in class can now do so. Teachers can assign students to work alone or in groups on Kahoot on a phone or computer.

Online-assignments

Teachers can integrate technology by posting schoolwork online (via learning systems like Blackboard, Brightspace, and Moodle). Because assignments are easily accessible, students can become more involved and organised.

Student Work Systematization

Teachers, administrators, parents, and students need communication skills to identify a student's strengths and flaws. Online grading systems like PowerSchool let teachers submit grades, track attendance, and handle transcripts.

Classrooms have tablet computers.

Tablet computers can help teachers personalize classes to students' requirements. Teachers can engage with each student personally when they work at their own pace.

Listserv

Listserv helps parents organise their children's email. Students and parents can keep in touch by sharing emails, newsletters, and chats.

Next part discusses age-specific implementation tactics.

Modern education can benefit from technology. Different grade levels and subject areas will employ technology differently.

WAYS TO USE TECHNOLOGY IN THE ELEMENTARY SCHOOL CLASSROOM

When it comes to younger students, technology can help them learn important skills that will prepare them for independent study in the future. Students can improve their math, spelling, phonetics, and reading skills, as well as their academic performance as a whole, by playing interactive games that give them real-time practise. Students and teachers can upload word lists to sites like Spelling Training, which lets them practise pronouncing words and make interactive games that are both fun and educational. This set of tools can also be used by parents to help their children practise important skills outside of the classroom.

Technology is used in middle school classrooms.

It's important for young people to learn important life skills while they're still learning to think on their own. In middle school, each subject is taught by a different teacher, so students have more freedom. Using technology to learn new skills, like how to investigate, can be used in many different subject areas. Websites like Easy Bib, for example, teach students how to use different search engines to find reliable sources and how to properly cite them to avoid plagiarism.

In high school classrooms, technology is often used.

Students can learn how to use technology in ways that will help them in college and their future jobs after high school. Students can get quick feedback on their work by using Microsoft Office and Google Drive to make spreadsheets, slide shows, and share documents. These Microsoft and Google tools are used in a wide range of jobs to organise information and communicate with coworkers or clients.

Think about some of the benefits students can get from using technology in their lessons.

Teachers are more likely to see good results from their work if they let their students use technology in the classroom. Using technology in schools has both pros and cons, and some could argue that not all of the cons are bad. But when technology is used in the classroom in the right way and procedures are put in place and checked or monitored, the benefits far outweigh any negatives. There is always something new to learn and something entertaining to do.

Keeping children interested and involved

Active participation is important for any educational plan to work. Technology keeps students interested and involved, whether they are working alone or in groups, because it can be used in different ways.

This tool can help students who learn in many different ways.

There is no one way to learn and remember information that works for everyone. Teachers can help students who learn at different speeds by using technology to customise lessons and change materials. When students use technology to help them with their studies, they can work at their own pace.

Students should learn life skills as soon as they can.

Technology has become its own language because people use it so much in their daily lives. If you run a business, you probably use some kind of Microsoft Office or Google Drive tool every day. When students have the chance to learn and practise these skills, they are better ready for life after high school or college.

CONCLUSION

At the very beginning of the process, both educators and learners ought to be able to make the most of information and communications technology. Therefore, the preparations for a teaching and learning model that is based on technology begin with the top management of the school making sure that everything is carried out correctly. If everything goes smoothly with the process of putting things where they belong. If ICT integration in schools is properly maintained, it will be an enormous success, and everyone will profit from it. This process begins at the very beginning, and it continues all the way through maintenance.

This is a word that can be used by both instructors and pupils. Because the application of information and communications technology, particularly in educational settings, focuses more on how it can be used than on what it can do for the user, and because it differs from theoretical applications, educators need time to learn and investigate it, go through the "trial-and-error" phase, and become comfortable with its application before they can use it in the classroom to teach learning.

In conclusion, one final strategy for enhancing students' abilities is to make extensive use of information and communications technology (ICT) in educational settings. The educational system of the country. Because of this, the nation's educational system will go up in rankings across the globe. The more skilled labour force of the future will be produced. The government needs to do more to increase the use of information and communications technology (ICT) in the classroom and change the attitudes that teachers have about how ICT may be used in the classroom. A person who assists others in acquiring knowledge is known as a teacher. It is of the utmost importance that any new policy be implemented efficiently and effectively as soon as possible. Changes: This is because kids now have access to updated forms of technology and communication tools that were previously unavailable to them. There are two possible locations for them to be, which are either at school or at home: In addition, educators need to have strong reading and writing abilities in addition to a wide range of transferable talents. In order to have effective teaching, teachers are needed that are able to improve their methods and approach by utilising information and communication technology (ICT). In the 21st century, it is essential to not only be able to teach but also to be able to learn.

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