



# INTEGRATING NEW TECHNOLOGY INTO TEACHING AND LEARNING - A STUDY

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## **Abstract:**

*The use of technology to improve student learning is referred to as technology integration in education. Different forms of technology, such as a virtual classroom, are used in the classroom to generate active learners who are interested in the learning objectives. The potential of educational technology depends in how educators use it and how it may be used to best meet the needs of their pupils. For both students and instructors, smartphones, laptops, and tablets are already an integral part of daily life. It makes sense that efforts are being made to study how to employ technology in the classroom to give students of all ages relevant learning opportunities. The main purpose of the study is to understand the integrating new technology into teaching and learning. This research completely based on secondary data sources such as websites, books, journals, research papers and so on.*

**Keywords:** Technology, Teaching, Learning, Integration etc.

## **INTRODUCTION:**

Digital learning technologies used effectively in the classroom may boost student engagement, assist teachers in creating better lesson plans, and promote individualized instruction. Additionally, it aids pupils in developing crucial 21st-century abilities. Technology makes knowledge instantly accessible, which is why having it in the classroom is so important. For both students and instructors, smartphones, laptops, and tablets are already an integral part of daily life. It makes sense that efforts are being made to study how to employ technology in the classroom to give students of all ages relevant learning opportunities.

The use of technology to improve student learning is referred to as technology integration in education. Different forms of technology, such as a virtual classroom, are used in the classroom to generate active learners who are interested in the learning objectives. Technology integration also opens doors for individualized education to fulfill each student's specific requirements as an individual learner within a larger classroom environment. Virtual learning environments, video, augmented reality (AR), robots, and other technological tools can not only make classes more engaging but also more inclusive learning environments

that encourage collaboration and inquisitiveness as well as give teachers the ability to gather data on student performance.

However, it's crucial to remember that technology is a tool and not an aim in itself in education. The potential of educational technology depends in how educators use it and how it may be used to best meet the needs of their pupils.

## **OBJECTIVE OF THE STUDY:**

The main purpose of the study is to understand the integrating new technology into teaching and learning in modern era.

## **RESEARCH METHODOLOGY:**

This research completely based on secondary data sources such as websites, books, journals, research papers and so on.

## **HOW TO INTEGRATE TECHNOLOGY IN THE CLASSROOM**

Contrary to popular belief, students do not necessarily need their own tablets or laptops to flourish with technology. Instead, it is possible for school systems to implement technology in the classroom without incurring significant financial costs. For auditory and visual learners, using technology during whole-class education can increase student participation. Simple technological integrations like Power Points, games, online homework assignments, or online grading platforms may make a significant difference in how well students do in the classroom.

### **➤ Power Points and Games:**

PowerPoint presentations may be used to engage students while introducing important concepts in the classroom. Links to films that support the concepts offered in the Powerpoint presentation deck can be incorporated into the slides, in addition to the usage of images and bulleted information. After a course or unit, students may review material using educational applications. While students can establish anonymous user identities to play the game, teachers can develop and share with one another. Students who may ordinarily be reluctant to participate in class can now participate in it as a whole. Teachers may choose whether they want their students to work individually or in teams while using the educational applications, which can be played on computers or smartphones.

### **➤ Internet Homework Assignments**

One method many instructors might start incorporating technology in the classroom is by posting homework assignments online (through learning systems like Blackboard, Brightspace, and Moodle). Assignments are conveniently available, which might improve student involvement and aid in the organization of the students.

## ➤ **Online grading Systems**

In order for teachers, administrators, parents, and students to identify a student's strengths and areas for development, communication is a crucial component of education. With the use of online grading platforms like PowerSchool, teachers may publish grades, examine student attendance trends, and manage transcript data.

## ➤ **Classroom Tablets**

When instructors are lucky enough to have tablets for their kids, technology may help them differentiate their lessons. During assignments, students can work at their own pace, and professors can provide individualized guidance.

## ➤ **Listserv**

Parents are able to manage and arrange their emails using software like Listserv. Teachers can inform parents of significant announcements, newsletters, and conversations to maintain open lines of contact.

## ➤ **Strategies of implementation for age groups**

Technology advantages can improve any modern classroom. The use and application of technology will vary depending on the grade level and subject matter of the classroom.

## ➤ **Ways to incorporate technology in the elementary classroom**

Younger kids can develop foundational skills using technology to get them ready for autonomous study in the future. Interactive games can help students improve their reading, numeracy, spelling, and phonemic awareness abilities. Students and teachers may submit their own word lists to websites like Spelling Training in order to improve word pronunciation and make interactive games. Additionally, parents may utilise these websites to practise key skills outside of the classroom..

## ➤ **Using technology in the middle school classroom**

Students may utilize technology to acquire fundamental life skills as they start to grow as independent thinkers. Middle school students will become more independent if they have different teachers for each topic. It is possible to use technology to learn skills like performing research across all subject areas. Through a variety of search engines, websites help students identify reliable sources and show them how to properly cite such sources in order to prevent plagiarism.

## ➤ **Technology in high school classrooms**

Students who have completed their secondary school can learn how to utilize technology in ways that will help them as they progress through college and into the workforce. Learning how to create spreadsheets, slide shows, and share papers using Google Drive and Microsoft Office enables students to get ongoing feedback on their work. These Google and Microsoft features are widely used in many professions to organize information and foster collaboration among coworkers or clients.

## WHY IS IT IMPORTANT TO INTEGRATE TECHNOLOGY IN THE CLASSROOM

When they provide students the chance to use technology in the classroom, teachers frequently have success. Some would argue that not all of the results of using technology for educational teaching are favorable. However, there are many advantages and consequences. The fact that there is an endless supply of information and entertainment available at all times may be considered a distraction, but if technology is incorporated into the classroom with routines in place that are monitored or assessed, the benefits outweigh the drawbacks.

### ➤ Keeping students engaged

Any lesson plan must include active engagement. Technology interests pupils because it is participatory, whether they are working alone or in groups.

### ➤ Helps students with different learning styles

Not every student picks up knowledge and retains it at the same rate or in the same way. With the use of technology, teachers may adapt their lessons to the diverse learning styles and capacities of their pupils. Students who use technology may also be able to work at their own paces.

### ➤ Prepare students with life skills

Because of how frequently it is utilized in daily life, technology has developed into its own type of literacy. Microsoft Office and Google Drive are used in many professions on a regular basis for at least one function, such as producing decks or slide shows for presentations or attaching documents to emails to convey crucial information. Students are better prepared for life beyond school by being given the opportunity to learn and develop these abilities.

## THE BENEFITS OF TECHNOLOGY IN EDUCATION

Technology may assist teachers in enhancing student performance, a goal that they have. Administrators should assist instructors in acquiring the skills necessary to improve student learning using technology in order to lessen the difficulties. The use of technology in the classroom should also facilitate instructors' tasks without adding to their daily workload. With the use of technology, learning may be expedited and practised in enjoyable ways for kids. It allows students to go deeper into challenging ideas and explore new disciplines. Students can acquire the 21st-century technical abilities required for future careers through the use of technology both inside and outside the classroom.

Nevertheless, guidance helps kids learn more efficiently. The World Economic Forum states that although technology may assist young pupils in learning and acquiring information through play, for instance, data shows that learning is most successful when assisted by an adult, such as a teacher. Leaders and administrators should assess the level of familiarity their faculty members have with online environments. They may now put up options for the future using the lessons they've learnt from this turbulent moment. For instance, managers can let instructors a week or two to carefully consider how to provide

courses that weren't previously offered online. Flexibility in these tough circumstances is crucial, along with looking at potential solutions.

Examples of the value of technology in education and its advantages for both students and instructors are shown below.

- **Increased Collaboration and Communication**

Collaboration may be encouraged via educational technologies. Students can interact with one another throughout lessons in addition to engaging with teachers. Students have the opportunity to collaborate to solve challenges through online classes and educational activities. Students can encourage one another and exchange ideas through collaborative activities. Technology also makes it possible for students to engage directly with professors. Students can seek more assistance on concepts that are challenging to comprehend as well as express questions about the classroom. Students may upload their schoolwork at home, and teachers can use computers to access and view completed assignments.

- **Opportunities for Personalized Learning**

24/7 access to instructional information is made possible by technology. Using a laptop or mobile device, classes can be taken totally online. Learning that is hybrid combines regular in-person classroom sessions with the use of technology from any location. Both possibilities allow for the customization of learning programmes for individual learner using technology. Lessons may be developed by teachers using the interests and skills of their students. Students may learn at their own speed, which is an additional advantage. Students can watch the lesson plan videos when they need to revisit the content covered in class to comprehend key ideas better. Teachers are able to see which students struggled with particular courses and provide additional guidance and assistance thanks to the data collected by these online activities.

- **Curiosity Sparked by Interesting Material**

Teachers may encourage children's curiosity and inquisitiveness through entertaining and instructive material, which, according to studies, is linked to academic performance. Students that are curious learn math and reading subjects more effectively. AR, videos, and podcasts may all be used to create compelling content. Students can engage with peers from across the world or add films in their work, for instance.

- **Increased effectiveness and productivity of teachers**

Teachers may utilize technology to boost productivity, apply practical digital tools to promote student learning possibilities, and boost engagement and support from students. Additionally, it gives teachers the ability to customize learning and enhance their teaching strategies. Technology may save schools money by lowering the cost of physical teaching supplies, making the best use of teacher time while increasing the effectiveness of educational programmes.

## • Become a Leader in Enriching Classrooms through Technology

Some of the technology used in education may not have been introduced to educators who are unfamiliar with it during their professional development or as part of their career preparation. Teachers can benefit from learning opportunities to develop their competences as they transition to using technology in the classroom and gain the necessary skills. For those seeking to use technology to change the educational system.

## CONCLUSION:

Technology integration should ideally direct, broaden, and improve learning objectives. Technology integration into the curriculum is only possible when it is employed as a tool to improve learning, ideally in the subject matter. Students may now study in ways that were not before conceivable because to technology. When students are empowered to choose technological tools to aid in timely information acquisition, information analysis and synthesis, and professional presentation, technology is successfully integrated into the classroom. Students who can choose technological tools to aid in timely information acquisition, information analysis and synthesis, and professional presentation of the material are more likely to successfully integrate technology into their learning. The use of technology in the classroom should be integrated into its operations and be equally available to all students.

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