
EXAMINING THE CHALLENGES AND FACTORS AFFECTING TECHNOLOGY INTEGRATION IN THE LEARNING PROCESS

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ABSTRACT

Technology integration in education involves incorporating tools such as computers, tablets, and educational software to enhance teaching methods and improve student learning outcomes. The present study examined the challenges and impact of technology integration in the learning process. This study aimed to identify challenges students faced in technology integration and assess the role and impact of technology on student learning. The population included university students from the Faculty of Social Sciences at a public sector university. The study employed a quantitative, descriptive strategy, selecting 100 social sciences students through random sampling. Data collection involved quantitative questionnaires, analyzed with SPSS using descriptive statistics, including frequencies and percentages. The results of this study explored that technology integration is useful for student learning but there are also challenges in using it for learning. The study also found that technology plays a main role in students' lives and greatly impacts their academic performance. The findings suggested that all stakeholders in education should ensure technology is utilized for its potential benefits. To integrate technology effectively,

fostering students' digital skills through critical evaluation, responsible information use, and online navigation is recommended.

KEYWORDS

Integrating technology, Learning process, challenges, impact, student

INTRODUCTION

Today's ever-changing educational environment has made technology integration an essential part of the teaching and learning process. Since technology has a significant impact on children's development, it is an essential part of education systems all over the world. The contemporary digital world of information, communication, and technology can be attributed to the use of technology in the classroom, which will foster student's global awareness (Akhtar & Roshan, 2022). According to Kenton (2005) technology integration in education is essentially the use of technological tools in the curriculum to meet the teaching-learning process and improve students' learning. Enhancing student involvement, providing access to a multitude of materials, and promoting the growth of digital literacy are benefits that come with incorporating technology into the curriculum. This integration is not without its difficulties and complications though. Research indicates that even with the invaluable support for education, there is a lack of successful integration of technology in classrooms (Tondeur, et al. 2017). The majority of educators have not addressed the pedagogical principles that would direct their use of technology for teaching and learning, which is a significant contributing factor to the problem of technology integration. The complex interrelationship between teaching and technology has not received enough attention yet. Teachers will discover the rationale to assess the suitability of the technologies they are utilizing and whether or not they are compatible with their lesson plan and learning objectives. Karabaevna et al. (2019). Students' high-level cognitive skills could be activated and their individual learning could be realized by allowing them to interact with technological tools like computers, tablets, and smart (interactive) boards with appropriate software and content in educational activities (Ardıç, 2021). Educators and educational institutions must address several issues related to technology integration, such as addressing access gaps, managing infrastructure costs, preparing teachers, overcoming resistance to change, ensuring quality control, and managing privacy and security concerns, short-term irregular training have been the biggest obstacles facing the educational industry as it moves to a tech-driven environment (Malaviya, 2023). Rudhumbu (2020) investigated the obstacles and elements involved in incorporating technology into the classroom. Moreover, the study concentrated on several elements that support the successful integration of technology into the process of teaching and learning in Lesotho's institutions. Opportunities for individualized staff development,

the availability of technical support, time allotted for the technology integration, ongoing staff development, instructor involvement in the integration planning phase, the type of curriculum being integrated with technology, and the availability of infrastructure are a few examples of these factors. For the further enrichment of this study, the researcher seeks to analyze the challenges of technology on student engagement and learning outcomes, as well as to investigate and comprehend the factors students have while incorporating technology into the learning process. This study aims to provide insightful information that can guide educational practices and policy by tackling these concerns.

LITERATURE REVIEW

In recent years, technology has become a crucial tool in almost every profession, providing educators with a valuable resource to support teaching and learning (Mac-Callum et al., 2014). The conventional approach to education, involving lectures and students seated in orderly rows, is no longer adequate. It is now the responsibility of educational institutions to incorporate technology into the curriculum and equip students with the skills and knowledge necessary for success in 21st-century careers (Cakir, 2012).

Technology integration can be leveraged to facilitate impactful teaching and learning. This approach was found to enhance the acquisition of 21st century skills and competencies in educational settings. Technology integration in education enhances the development of essential skills such as communication, critical thinking, collaboration, problem solving, and computational thinking, as noted by educators. Furthermore, the incorporation of technology is widely recognized for creating an engaging learning environment that promotes academic achievement and motivates learners (Ramalia & Molwele, 2022).

The recent COVID-19 pandemic has accelerated the integration of digital technologies in education. These technologies have brought about a significant transformation in the education system, serving not only as a source of knowledge but also as a platform for collaborative learning, mentorship, and assessment. The advancements in educational technology have greatly facilitated students' academic endeavors, replacing traditional tools like pen and paper with various software and digital resources. For instance, students now use tools to create presentations and projects, and devices like iPads have made note-taking more convenient due to their lightweight nature (Haleem et al., 2022). The use of technology can be a valuable educational tool for students and teachers, regardless of their location. However, it also has the potential to be highly distracting and may hinder students' learning and development. Research has identified both positive and negative impacts of

technology in the classroom environment. Like any technological advancement, there are trade-offs, where the positive and negative aspects balance each other out, resulting in no significant difference in impact.

Technology Integration and Learning Outcomes

The utilization of technology has been characterized as pioneering, imaginative, and even an enjoyable instrument that can unlock the creative potential of students. Scholars have examined the beneficial impacts of technology in the educational setting, encompassing but not restricted to heightened engagement, motivation, and expanded opportunities. The introduction of something new into the classroom can have a profound influence on various aspects, ranging from students' daily routines to the overall learning environment. The FATIH project, led by Saritepeci & Durak (2017) in the educational setting has demonstrated its beneficial influence on both students and educators. The FATIH project was established to explore the impact of technology usage in education on classroom management. It was anticipated that the established norms and regulations of classroom management would be affected due to technical issues potentially causing disruptions and triggering negative student behaviors. Upon careful analysis, it was observed that the overall impact of technology was moderate; however, teachers with four to six years of teaching experience exhibited a more pronounced positive response about their management, particularly when utilizing technology for five to seven hours daily.

Incorporating the use of several technological applications enables students to engage in higher-order thinking, enhance their communication skills, participate in collaborative problem-solving activities and discussions, critically reflect on content, and expand their digital competencies. By leveraging technology, students can engage in deeper and more meaningful learning experiences, such as analyzing complex data sets, creating multimedia presentations, and collaborating with peers on projects. This not only enhances their cognitive abilities but also prepares them for the digital age we live in (Schindler et al., 2017). Research has investigated the impact of technological enhancement, such as lecture recordings and podcasts, on academic achievement. The studies compared the academic performance of students who were taught using technology-enhanced methods with those who were taught without it. The findings revealed that students who learned academic content in a technology-enhanced classroom achieved higher academic success compared to those who learned the content without the use of technology (Carle et al., 2009).

Utilizing technology, certain educators are embracing the flipped classroom model, enabling students to review course material at home and participate in interactive discussions, exercises, and activities during school hours. In the study conducted by

(Song, 2017) , it was noted that there is a scarcity of research on the development of students' problem-solving skills and improvement of their conceptual understanding in a flipped classroom environment for mathematics inquiry. While students in this setting are primarily responsible for their own learning, they may miss out on valuable lecture time that could stimulate in-depth discussions about problem-solving. According to Fisher et al. (2014) the incorporation of technology in classrooms has led to a shift in the role of teachers from traditional lecturers to facilitators who guide students on their learning journey. The teacher is no longer the primary source of information, but rather a facilitator of learning, learning alongside the students and enabling them to take ownership of their own learning process. This approach encourages students to become producers of information rather than mere consumers, as they are empowered to make judgments about the value of the content they gather and to self-assess their own learning using technology.

Challenges faced by students in integrating technology

One of the most significant external factors influencing learning within the classroom is the presence of mobile devices. When students are entrusted with technology such as Chrome books or tablets, it can become a source of distraction and have a negative impact on their learning experience. According to research conducted by Ferreira (2016) in secondary classrooms, mobile phones were found to be the most distracting feature of the included ICTs (Information and Communication Technologies) in the classroom. Furthermore, the use of mobile devices has been linked to an increase in plagiarism, as students have unlimited access to information. Burke et al. (2022) provided support for the assertion that mobile devices have a detrimental impact on the classroom environment due to the distractions they introduce. They conducted a study where students utilized mobile devices for specific classroom related purposes after recognizing the importance of social interaction in the learning process. While mobile learning holds promise for advancing education, the most effective implementation methods are yet to be determined. Upon analyzing the gathered data he also concluded that mobile devices were not utilized collaboratively as anticipated and had limited educational utility. Santos, et al., (2021) identified a negative impact on learning and student performance attributed to the use of cell phones for non-academic purposes during class, such as texting/messaging and scrolling through social media. This not only led to distractions for the individual students but also affected those around them. He also observed that students who were in classes where mobile phones were prohibited reported experiencing more positive interactions with their teachers compared to classes where mobile phones were allowed. While the integration of technology in the classroom can offer advantages, it is essential to acknowledge its potential to cause distractions, necessitating a shift in student behavior.

Factors influencing the integration of Technology

The endeavor of incorporating technology into classroom instruction in a meaningful and cutting-edge manner presents an ongoing challenge (Pittman & Gaines, 2015). Despite the availability of technology initiatives in classrooms, numerous factors hinder the effective implementation of technology, including inadequate infrastructure, insufficient technological resources, and the need for comprehensive professional development (external factors). Additionally, internal factors such as low teacher self-efficacy and perceptions further contribute to the complexity of integrating technology into classroom settings. However, it is crucial to recognize that in preparing students for success in higher education and the workforce, the integration of technology is indispensable. In order to effectively incorporate technology into their teaching, educators require access to robust and current hardware and software (Mejia-Rodriguez and Kyriakides, 2022).

Poor Infrastructure

In order to achieve success, the transition to a flexible and accessible learning environment must be underpinned by a robust technological framework, with a particular emphasis on network infrastructure (Build the 21st century classroom infrastructure., 2018). School districts need to make it a top priority to implement the latest technology in network administration and security from reliable vendors so that classrooms are well equipped for the networking requirements of the future. Often, the infrastructure aspect is disregarded when acquiring technological tools and planning their integration into the learning environment. When making these crucial decisions, various factors need to be taken into consideration, such as the range and purpose duration of the devices. For collaborative classrooms to function effectively, it is essential not only to have furniture arranged to facilitate group learning but also to ensure a robust Wi-Fi signal that provides students with seamless connectivity for a variety of devices at any time and from anywhere (Build the 21st Century Classroom, 2018). Infrastructure plays a crucial role in determining the quality and reliability of Wi-Fi connections, and can significantly impact internet access for technology devices. Specifically, in rural areas and older buildings with inadequate power voltage, the lack of proper infrastructure can hinder the ability of multiple devices to connect to the internet.

Pakistan has likewise recognized the role that Information and Communication Technology (ICT) plays in education. In line with international educational standards, the government's concerted attempts to incorporate ICT into teaching and learning activities are reflected in the national educational policy. (Pakistan Ministry of Education, 2018). However, a number of problems, including a lack of ICT infrastructure, impede growth in developing nations like Pakistan. (Akram et al.,

2021a), including electricity and internet (Akram et al., 2021b), technological knowledge and proficiency (Asad et al., 2020), and inadequate training for academic institution teachers (Abbasi et al., 2021). In addition to the technological aspects mentioned above, instructors' individual views and convictions are vital to the successful integration of technology. Their views influence the pedagogical choices they make on how best to integrate technology into their teaching methods, therefore meeting the demands of the twenty-first century on education (Tondeur et al., 2017).

Inadequate Technology

Adequate funding and modern infrastructure are critical for the successful integration of technology into teaching methods. On the other hand, a review of research found that the second-biggest obstacles to instructors' successful integration of technology into their teaching methods were a lack of resources and poor infrastructure. Similar concerns were brought up by Garcia-Morales et al. (2021), who also underlined the importance of sufficient infrastructure and technology resources to enable efficient teaching and learning methods. As a result, it is critical that the appropriate authorities set aside a sizeable sum of money to support educators and learners by offering modern facilities and sufficient supplies, allowing for the best possible use of ICT in the classroom.

Lack of Sufficient, Effective Professional Development

Even with access to adequate technology, effective professional development is a key factor in increasing the level of technology integration in classrooms. Simply providing teachers with training opportunities related to technology use does not automatically lead to higher levels of integration; rather it is only when teachers are equipped with the necessary knowledge, skills, resources, and support that they can effectively incorporate technology into their curriculum to maximize its impact on teaching and learning (Papanastasiou et al., 2003).

Teachers face several obstacles in their efforts to successfully facilitate learning because of the distinctions between traditional and online teaching approaches. To successfully incorporate technology into their teaching activities, teachers must have the essential professional expertise (Aslam et al., 2020). Due to a lack of funding and professional competence, teachers in the Asad et al. (2020) research report found that they receive favorable feedback from their governing bodies, but they still struggle to integrate ICT into their lesson plans. Teachers are frequently forced to improvise when successfully incorporating digital teaching techniques into their curricula, claim Abbasi et al. (2021) and Thaheem et al. (2021).

Educational authorities should give instructors enough assistance to improve their professional and technical skills to solve this problem. According to Jogeza et al. (2018), secondary school technology utilization is still in its infancy. The influence of the COVID-19 pandemic on education has resulted in a greater use of technology in online learning activities. Teachers should give interactive and collaborative projects that encourage contact with classmates and instructors to improve learners' knowledge and resolve concerns. Effective ICT integration requires teachers to be proficient in both technology and instructional approaches, which greatly depends on their confidence.

Additionally, as noted by Watson and Rockinson-Szapkiw (2021), using technology in instructional practices assists in elevating instructors pedagogical and technological abilities in addition to improving the quality of education. Though these benefits exist, instructor technical incompetence has been the most commonly mentioned problem found in the evaluated research. Hassan (2021) has brought attention to a related problem, in which teachers encountered difficulties integrating ICT into their lesson plans because they lacked the necessary technological expertise. Consequently, the appropriate authorities must provide training courses to enhance instructor' technical proficiency and prioritize the integration of ICT in education, while also considering incentives or certificates for educators.

Low self-efficacy

Self-efficacy is the conviction that one can carry out an activity successfully and get the intended result. This concept, which is central to Bandura's social cognitive theory (1977), has a significant impact on how individuals approach and interact with their environment. According to researchers in education, self-efficacy is influenced by four key factors: performance accomplishment, vicarious experiences, verbal persuasion, and physiological stress (Howardson & Behrend, 2017). It is anticipated that the implementation of digital classrooms, which encompass a wide array of technological tools, will enhance the academic achievement of students. Nevertheless, it is illogical to assert that these objectives can be attained without the requisite proficiency in utilizing online technologies effectively (Ozerbas & Erdogan, 2016). The concept of self-efficacy suggests that individuals evaluate and assimilate various forms of information regarding their capabilities, and subsequently adjust their decision-making and level of effort based on this assessment (Bandura, 1977). Our behavior is within our control, but the outcome is not. Furthermore, there is a notable connection between teachers' utilization of technology in the classroom and their self-efficacy (Li, et al, 2015). Considering the high expectations for student achievement and accountability, teachers are more inclined to incorporate technology into their teaching practices if they perceive it to have a positive impact on their

students' learning. Conversely, if they believe that technology would not enhance their students' performance, they are less likely to integrate it. Additionally, it is noteworthy that 62% of elementary students feel they possess a greater understanding of technology than their teachers (Poll, 2015). This may contribute to the perceived lack of confidence in some teachers.

Teacher Perceptions

The way that teachers integrate technology into their lessons is greatly influenced by their attitudes, which they react to in a favorable or negative way depending on their experiences (Abbasi et al., 2021). Teachers' attitudes and professional expertise on the use of ICT in teaching practices have been studied in a number of research. While some educators believe that social connection between students and teachers is important. Ahmed et al. (2017) claimed that in-person instruction is more engaging than online instruction. Consequently, these educators favor in-person instruction and hold a disapproving opinion of online learning. Due to a number of obstacles, Afridi and Chaudhry (2019) found that there was a deficiency in the integration of technology into teaching methodologies at all Punjabi institutions.

Despite the increasing availability of technology in schools, teachers are often seen as reluctant to embrace it. They are used to traditional methods, which can lead to frustration when trying to transition to new technology, causing them to avoid using 21st-century devices. Teachers who lack digital literacy, the ability to comprehend and utilize information from various digital sources, are the ones who struggle to integrate technology. Their perception of the effort required to learn new technology and its practical value significantly influences their decision to use it (Mac-Callum et al., 2014). This aligns with other studies that identified the preparedness among teacher's plays a pivotal role in shaping their use of technology in the classroom (Ottenbreit-Leftwich et al., 2010). Educators also view the integration of technology in a negative light due to the time required for training and planning to incorporate it into the curriculum. Integrating technology demands preparation, classroom management practices, and attention that is not typically allocated to these areas. It is more convenient to maintain the current state of affairs.

RESEARCH OBJECTIVE

1. To investigate the primary challenges encountered by students when integrating technology into the learning process.
2. To assess the impact of technology integration on student engagement and learning outcomes across diverse educational settings.
3. To examine the perceptions and attitudes of students concerning the role of technology in education.

RESEARCH HYPOTHESES

1. The integration of technology into the learning process is associated with enhanced learning outcomes.
2. various factors significantly influence the integration of technology in the learning process.
3. The challenges faced by students in integrating technology into their learning process negatively impact their overall educational experience.

RESEARCH QUESTIONS

1. What are the key challenges faced by students when integrating technology into the learning process?
2. How does the integration of technology influence student engagement and learning outcomes in their academic achievement?
3. What are the perceptions and attitudes of students, concerning the role of technology in education?

RESEARCH METHODS

The present social science research essentially focused on descriptive design and aimed at describing the challenges faced by learners involved in learning with technology integration. A quantitative approach was followed to explore areas in the form of a survey conducted by students. Simple random sampling was used, involving a public-sector university. The sample size of the present study was 100 students of the faculty of Arts & Social Sciences. Participants were selected based on their experiences related to the use of technology for learning. The focus was on several people who studied at the same place but had different levels, and the aim was to understand them as a group, with their different but interdependent functions and ways of thinking. The research instrument was a close-handed questionnaire. A structured tool was designed and used to generate data from the University. It was comprised of three themes considering research objectives and research questions. A 5-point- Likert scale (ranging from strongly agree to strongly disagree) was used to collect the opinions of students in the questionnaire. The data was collected through an online Google form and personal administration of printed questionnaires. Research protocols such as credibility, dependability, and conformability were followed to ensure trustworthiness. Participants were selected with ethical considerations. They were informed by consent, emphasizing the voluntary nature of participation. The confidentiality and anonymity of participants were also ensured. The collected data helped to ensure clarity. Data was processed by IBM SPSS 22 and rigorously analyzed based on empirical evidence gathered through a survey. Percentages and frequencies were taken out to find the results.

FINDINGS

The collected data in the present research was analyzed using descriptive statistics, specifically frequencies and percentages, through the SPSS 22 version. The findings of this study, aligned with the main objectives, are presented in the following tables.

Table 1: Frequency and Percentage Distribution of Respondent's Gender

Gender	Frequency	Percentage
Male	33	33
Female	67	67
Total	100	100

According to the data provided in the table above, it can be observed that 33% of the respondents were male, while the remaining 67% of the respondents were female.

Table 2: Frequency and Percentage distribution of Respondent's educational Qualification

Educational qualification	Frequency	Percentage
Undergraduate	59	59
Graduate	29	29
Post-graduate	12	12
Total	100	100

The table provides insights into the educational background of surveyed students. It shows that 29% were graduates, 12% held postgraduate qualifications, and the majority, comprising 59%, were undergraduates. This indicates that most participants were pursuing undergraduate studies. This part consists on frequency and percentage distribution of student's responses.

Table 3: Student perception regarding the challenges of integrating technology

S NO.	Items	SA	A	N	D	SD	Missing
1.	I find it difficult to focus on my learning materials when there are too many distractions on my device.	43%	44%	9%	2%	2%	-
2.	I worry that technology is replacing traditional teaching methods and	29%	31%	20%	13%	7%	-

	hindering my learning						
3.	I experience technical issues when using technology for learning	24%	22%	30%	13%	10%	1
4	I am concerned about the privacy and security of my personal information when using technology for learning	23%	48%	20%	4%	4%	5
5.	I find it challenging to keep up with the constant changes and updates in educational technology.	14%	38%	27%	14%	6%	1
6.	I believe that technology integration leads to a decrease in face-to-face interaction and social skills development.	34%	43%	19%	1%	3%	-
7.	Integrating technology decreases my classroom participation.	30%	31%	20%	9%	9%	1
8.	Students do not have equal access to technological resources.	32%	39%	14%	7%	6%	2
9.	Lack of technological knowledge among teacher's leads to poor teaching.	34%	41%	19%	4%	2%	-

NB: SA: Strongly Agree, A: Agree, N: Neutral, D: Disagree, SD: Strongly Disagree
(Source: Prepared by the authors, 2023)

Table 3 reveals significant challenges students face when incorporating technology in learning. Firstly, it is clear that students face many challenges while integrating technology into the learning process. They struggle to maintain focus (43% strongly agree, 44% agree) due to device distractions. Concerns arise about technology replacing traditional teaching (29% strongly agree, 31% agree) and technical issues (24% strongly agree, 22% agree) during learning. Privacy concerns also exist (23% strongly agree, 48% agree) when using tech for learning. Adapting to evolving educational technology poses a challenge (14% strongly agree, 38% agree), impacting social skills (34% strongly agree, 43% agree) and classroom participation

(30% strongly agree, 31% agree). Unequal tech access is noted (32% strongly agree, 39% agree), as is the impact of teachers' limited tech knowledge on teaching quality (34% strongly agree, 41% agree).

Table 4'': Perception and attitude of students on the role of technology

S N O.	Items	SA	A	N	D	SD	Missin g
1.	I prefer to learn through technology rather than traditional methods.	35%	30%	18%	14%	3%	-
2.	Technology Integration enhances my interest in learning.	26%	48%	21%	4%	1%	-
3.	The integration of technology into my education has improved my critical thinking and problem-solving skills.	31%	49%	13%	6%	1%	-
4	I feel more motivated to learn when technology is used in the classroom.	32%	40%	18%	6%	4%	-
5.	Technology integration eases the pressure on me as a learner.	30%	31%	26%	8%	5%	-
6.	Technology helps me to work more efficiently and effectively.	38%	39%	12%	9%	1%	1
7.	I believe that technology has improved my learning outcomes.	33%	46%	17%	1%	2%	3
8.	I believe that using technology in the classroom improves my overall academic performance.	31%	42%	21%	4%	1%	1
9.	Technology has made it easier for me to collaborate with my peers.	24%	49%	18%	5%	3%	2
10	Technology has improved my communication skills.	39%	36%	15%	8%	2%	-

NB: SA: Strongly Agree, A: Agree, N: Neutral, D: Disagree, SD: Strongly Disagree (Source: Prepared by the authors, 2023)

Table 3 shows a favorable outlook on technology's role in learning of the majority of students. Notably, 35% strongly agree and 30% agree that they prefer technology-based learning over traditional methods. Additionally, 26% strongly agree and 48% agree that integrating technology sparks greater interest in learning. Furthermore, 31% strongly agree and 49% agree that technology integration enhances critical thinking and problem-solving skills. Moreover, 32% strongly agree and 40% agree that the use of technology in the classroom fosters motivation to learn, while also

eases pressure on learners (30% strongly agree, 31% agree). Students also found technology instrumental in improving efficiency and effectiveness (38% strongly agree, 39% agree). Furthermore, 33% strongly agree and 46% agree that technology positively impacts their learning outcomes, and 31% strongly agree, 42% agree that it enhances overall academic performance. Regarding collaboration, 24% strongly agree and 49% agree that technology facilitates easier peer collaboration, while 39% strongly agree and 36% agree that it enhances their communication skills.

Table 5
Impact of technology integration on students

S NO.	Items	SA	A	N	D	SD	Missing
1.	Technology helps me to better understand complex concepts.	49%	34%	10%	5%	2%	-
2.	Technology makes learning easy and affordable at any time and from anywhere.	48%	30%	18%	4%	-	-
3.	Technology integration makes me feel more competent as a learner.	28%	46%	20%	4%	1%	1
4.	Technology integration helps me stay more engaged during class.	23%	34%	31%	7%	3%	2
5.	Technology allows me to personalize my learning experience based on my individual needs and preferences.	29%	47%	17%	5%	2%	-
6.	Integrated technology Motivates me to get more involved in learning activities.	30%	39%	22%	5%	2%	3
7.	It improves my learning of critical concepts and ideas.	35%	41%	14%	7%	3%	-
8.	Integrated technology broadens learning opportunities for me.	31%	48%	14%	5%	2%	-

NB: SA: Strongly Agree, A: Agree, N: Neutral, D: Disagree, SD: Strongly Disagree
(Source: Prepared by the authors, 2023)

Table 5 shows, student's views on how technology impacts their learning. A significant portion, with 49% strongly agreed and 34% agreed, believes that technology aids in understanding complex concepts. Similarly, 48% strongly agree and 30% agree that technology facilitates easy and affordable learning anytime,

anywhere. Additionally, 28% strongly agree and 46% agree that technology integration boosts their confidence as learners. Moreover, 23% strongly agree and 34% agree that technology helps keep them engaged during classes. Students also value technology's ability to personalize learning, with 29% strongly agreeing and 47% agreeing on this aspect. Furthermore, 30% strongly agree and 39% agree that integrated technology motivates their involvement in learning activities. Moreover, 35% strongly agree and 41% agree that technology enhances learning critical concepts, while 31% strongly agree and 48% agree that integrated technology broadens their learning opportunities. These findings highlight students' positive perceptions of how technology positively influences various aspects of their learning experiences.

DISCUSSION

The present research found that although integrating technology is efficient in learning. However, it bears some challenges to incorporate it in educative purposes. The results of this study indicate that the success or failure of technology integration can be linked to several factors. The 1st null hypothesis that the integration of technology into the learning process is not significantly associated with enhanced learning outcomes has been rejected. While challenges exist, technology integration significantly benefits students' learning experiences and outcomes. The current research identified positive impacts of technology integration on student engagement and learning outcomes. Students involved in the research reported heightened engagement with technology in the classroom, stating that it aids in understanding complex concepts, boosts their confidence as learners, enhances class participation, improves comprehension of critical ideas, and broadens overall learning opportunities. The 2nd null hypothesis that the various factors described in literature do not significantly influence the integration of technology in the learning process has also been rejected. Students expressed a positive perception and attitude toward technology's role in learning. They prefer learning through technology over traditional methods and believe that technology integration enhances their interest in learning. Moreover, integrating technology has improved their critical thinking and problem-solving abilities, increased motivation to learn, reduced academic pressure, improved efficiency, and effectiveness in work, and improved communication skills. The 3rd null hypothesis is that the challenges faced by students in integrating technology into their learning process do not have a significant impact on their overall educational experience. It has an impact negatively. An essential challenge highlighted in this study revolves around Teachers' insufficient technological knowledge, leading to substandard teaching practices. Teachers will not be capable of doing anything in this profession if they are not provided effective professional development training on new technologies (Mckenna, et al., 2016). This knowledge

gap impedes the effective integration and utilization of technology in education, impacting the quality of instruction. That can certainly be true in some cases.

In the current article, Students opinioned that they learn modern and effective ways of learning rather than traditional methods like flipped classrooms. Researchers encountered main difficulties while collecting data. Students were busy with their semester exams. Most of them were not willing to participate in the study due to preparation for exams. For those who participated in the study, their consent was taken and ethical considerations were also maintained with every single participant.

CONCLUSION

Technology integration into the classroom is a diverse process. The results of this study showed that students face various challenges by integrating technology into the learning process. When there are numerous distractions on a device, such as notifications, messages, social media apps, and tempting content, it becomes challenging to maintain focus on learning materials. However, from another perspective, technology has become an integral part of education and teachers who are less familiar with it might struggle to effectively integrate it into their teaching methods. However, it is important to recognize that technology is a tool, and its effectiveness depends on how well it is used. Teachers who lack technological knowledge might need support and training to leverage these tools for better teaching rather than it being solely the cause of poor teaching. Students overwhelmingly exhibit positive attitudes and preferences toward integrating technology in their education, despite the challenges involved. The incorporation of technology significantly boosts their interest in learning and has a positive impact on their critical thinking and problem-solving abilities. Students firmly believed that technology facilitates collaboration among peers and evidently improves their communication skills. The research findings highlighted how technology makes learning convenient and cost-effective, accessible from anywhere and at any time. Moreover, students noted that technology significantly enhances their understanding of critical concepts and ideas, positively impacting their learning outcomes.

RECOMMENDATIONS

The present research paper aimed to examine challenges and factors affecting technology integration in the learning process. As technology continues to evolve, its incorporation into educational settings becomes increasingly important. Educators must ensure that technology integration must be aligned with pedagogical goals. Identify learning objectives first and then select appropriate technologies to enhance and support those objectives. Educational organizations must ensure that students receive proper training on how to use the technology effectively. This includes not

only technical training but also guidance on how to use technology for learning purposes. Teachers and support staff should be available to assist students when they encounter difficulties. Researchers suggest more studies are needed to understand how technology affects classrooms. It is essential to promote digital literacy among students. This involves teaching them how to critically evaluate online information, navigate digital platforms, and use technology responsibly. By enhancing their digital literacy skills, students can better integrate technology into their learning process. Technology can improve classroom teaching, so the government should encourage its use in education. Policymakers must support schools to make sure tech is used well. By implementing these recommendations, educational institutions can better support students in overcoming the challenges associated with integrating technology into the learning process.

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