

# THE BENEFITS OF USING ICT WITHIN THE EDUCATIONAL CONTEXT

The integration of Information and Communication Technology (ICT) into educational practices has become an essential aspect of modern education, particularly as technology becomes increasingly pervasive in daily life. For the Millennial generation and beyond, the language of modern life is technology, and ICT is at the forefront of this transformation. In the context of education, this shift has moved the conversation from whether ICT should be used in classrooms to how it should be implemented effectively. As Singh (2021) aptly states, imagining a modern education system without the infusion of digital technology is not only unrealistic but also incomplete. The digitalization of education is no longer a mere trend but a fundamental change in the way we teach and learn.

Education technology represents a rapidly evolving field of innovation that can provide targeted, interactive, and effective learning for students across various skill levels. According to Best and Pane (2018), educational technology offers opportunities for more personalized learning experiences, allowing teachers to differentiate instruction to meet the individual needs of their students. Digital platforms, along with data-driven tools, enable more precise tracking of student progress, which in turn supports more effective lesson planning and communication between home and school (Best & Pane, 2018). The capacity of these tools to track and measure various aspects of student learning has been transformative, offering educators valuable insights into their students' strengths and areas for improvement.

However, while the adoption of digital technology in education is increasingly seen as a necessity, its integration into classrooms has not been universally embraced by educators. As Howard and Mozejiko (2015) point out, many teachers have been labeled as resistant to technology, often due to concerns over their own technological proficiency and the potential disruption of traditional pedagogical practices. While this resistance is understandable, it must be acknowledged that digital technology is not a passing trend but an essential aspect of modern life, and therefore, should be integrated into education to prepare students for a world that is increasingly reliant on ICT. Since the global COVID-19 pandemic, the dependence on ICT has grown exponentially, with online learning and digital tools becoming crucial in maintaining educational continuity. The pandemic highlighted the importance of ICT as a tool for connecting students, educators, and communities in a time of social isolation (Camlin & Lisboa, 2021). This shift underscores the need for educational institutions to invest in resources and training to help teachers effectively utilize digital tools and respond to evolving educational needs.

As a teacher, I believe the benefits of ICT in the classroom are both clear and strategic. One obvious advantage of digital technology is its alignment with the demands of the modern workforce, where ICT skills are indispensable in virtually every industry. As the world becomes more interconnected through technology, it is critical that education systems equip students with the skills necessary to thrive in this environment. Zarabanda (2019) emphasizes that new generations must acquire competencies to

navigate the technological landscape effectively. He states, “It is clear that school has a transcendental function in individuals’ development and their environment, and that around school is where future professionals are guided with the necessary abilities to address the challenges of current society” (p. 76). The use of ICT in education, therefore, becomes a vital tool in preparing students for the complexities of the modern world.

However, despite the potential advantages of ICT, there remain significant gaps in its full utilization within the educational context. One of the reasons for this is that national and international testing frameworks often fail to rigorously assess students’ technological competencies (Zarabanda, 2019). Additionally, there are challenges associated with the technological abilities of teachers, which can hinder the effective integration of ICT into teaching practices. Many teachers, particularly those with limited experience using digital tools, may struggle to incorporate ICT into their pedagogy in ways that maximize its potential. Furthermore, the traditional structure of education often prioritizes content knowledge and standardized testing over the development of digital literacy skills, leaving many students ill-prepared for the demands of the digital age.

The internet, as the largest and most dynamic library of information, has revolutionized the way students access knowledge. Wen et al. (2015) argue that knowledge construction—seeking, interpreting, analysing, summarising, critiquing, and reasoning through various arguments—is a crucial cognitive process that prepares students for the future workforce. This process has been greatly enhanced by the accessibility of online resources, allowing students to engage with up-to-date information and develop critical thinking skills. As educators, it is our responsibility to engage students in these processes regularly, providing opportunities for them to interact with diverse perspectives and develop the analytical skills necessary for success in the modern world.

The overarching goal of integrating ICT into education is to enhance the quality of teaching and learning, ensuring that educational practices align with the technological demands of the 21st century. Singh (2021) argues that ICT not only improves the learning experience but also makes education more accessible to a wider audience, transforming the teacher-student dynamic. In a traditional classroom, the teacher is the primary source of knowledge. However, digital tools allow students to engage with a vast array of resources, moving beyond the confines of the classroom and the teacher’s expertise. This shift democratizes access to information and opens up new possibilities for collaboration, allowing students to engage with peers and experts from around the world.

The rise of virtual classrooms, such as Google Classroom, has opened up tremendous possibilities for education. Teachers can use these platforms to share materials, assign tasks, create quizzes, manage deadlines, and facilitate discussions (Harjanto & Sumarni, 2019). These tools also offer parents and guardians greater involvement in their children’s learning, providing them with the ability to track progress and offer support. The collaborative nature of digital learning environments encourages students to become active participants in their education, moving from passive recipients of information to active contributors to the learning process (Harjanto & Sumarni, 2019).

In addition to these educational benefits, ICT also offers environmental advantages by reducing the need for paper and printed materials. This reduction not only lowers costs but also allows for more efficient use of classroom time, as teachers spend less time on administrative tasks such as printing and distributing materials. Moreover, digital tools allow for better follow-up, as teaching materials and exercises can be easily shared and reviewed online (Harjanto & Sumarni, 2019). Teachers who have implemented tools like Google Classroom report that they are able to store documents, tasks, and quizzes securely, reducing the risk of misplacing or losing materials. Students are also more engaged, as they receive notifications of tasks and can access assignments directly through their email or the app (Harjanto & Sumarni, 2019).

Despite these advantages, the use of ICT in the classroom is not without its challenges. As noted in the Google Classroom study, the use of digital tools can lead to distractions, with students accessing unrelated websites or engaging in non-educational activities (Harjanto & Sumarni, 2019). However, with clear guidelines and careful monitoring, these challenges can be mitigated. As I see it, the role of ICT in the classroom will continue to grow, and it will play a crucial part in shaping the future of education. By providing teachers with the tools, resources, and training necessary to effectively integrate technology into their pedagogy, we can ensure that students are prepared for the digital world in which they will live and work.

## References

Best, K. L., & Pane, J. F. (2018). Expert insights on a timely policy issue, Perspective (RandCorporation), October 2018

Camlin, D. A., & Lisboa, T. (2021). The digital 'turn' in music education (editorial), Music Education Research, 23(2),129-138. DOI: 10.1080/14613808.2021.1908792

Harjanto, A. S., & Sumarni, S. (2019). Teacher's experiences on the use of Google Classroom [Conference session] 3rd English Language and Literature International Conference (ELLiC) Proceedings, 2019.

Howard, S.K., & Mozejiko, A. (2015). Teachers: technology, change and resistance. In M. Henderson & G. Romeo (Eds.), Teaching and Digital Technologies: Big Issues and Critical Questions (pp. 307-317). Port Melbourne, Australia: Cambridge University Press.

Singh, M. N., (2021). Inroad of digital technology in education: Age of digital classroom. Higher Education for the Future, 8(1),20-30.  
<https://doi.org/10.1177%2F2347631120980272>

Wen, A. S., Zaid, N. M., & Harun, J. (2015). A meta-analysis on students' social collaborative knowledge construction using flipped classroom model [Conference session] 2015 IEEE Conference on e-Learning, e-Management, and e-Services, Malaysia.

Zarabanda, D. E. B. (2019). ICT and its purpose in the pedagogical practice, Research in Social Sciences and Technology, 4(2), 83-95.