

THE TEACHER AS A TECHNICIAN: EXPLORING THE ROLE OF TECHNOLOGY IN EDUCATION

by:

Jomar C. Rubio

Teacher III, Sibul Elementary School

Using technology in the classroom has become a vital part of modern training. Oke and Fernandes (2020) say that digital technology makes it easier for teachers and students to talk to each other and can improve and change how we teach and learn. This change can be seen in how educational technology engages lecture teaching (Tuma, 2021). Teachers must instruct students on the proper use of technology to maximize its benefits. Pathirana (2023) goes into more detail about how teachers' roles change when they use technology for education. He says that modern technologies have quickly increased teachers' responsibilities, making technology a crucial factor for 21st-century teachers.

People are interested in how educational technology affects teaching and learning in higher education. Ali (2024) investigates this topic and lists various technologies, such as computers, video, the Internet, and different programs, which help teachers effectively teach content to their students. According to Chomunorwa et al. (2022), teachers have different opinions about how technology should be used in schools, especially in deprived areas where technology is known to improve learning. Sastre et al. (2022) detail how digital technologies can help encourage collaborative creation in language learning. They focus on how technology can be used as a tutor, a tool, and a medium to help students be creative and work together.

Rafalow and Puckett (2022) show how educational institutions decide which technologies are most valuable for different learning reasons. Gcabashe and Ndlovu's (2022) study is mainly about teachers' technology self-efficacy and how it affects learning-centered classrooms. They show how the widespread use of technology in education

changes the way teachers teach. Adhikari's research from 2021 on using technology to teach English in Nepal shows that using technology to improve teaching methods leads to better student outcomes, teaching methods, and educational progress.

As Chacón-Prado (2023) points out in his literature study, integrating technology into education is important because it changes how we teach and learn. Yu et al. (2022) look at how interaction and involvement are different in smart classrooms compared to traditional classrooms. They show how incorporating technology into the school will get more students to work together and take part. In their 2023 article, Pragasam and Sulaiman discuss using technology in ESL reading classes. They show that using technology to teach languages can help students do better.

Aprilo et al. (2023) say that teachers need to use technology in every lesson to meet the needs of 21st-century learning goals. It shows how vital technology is in today's schools. Önalán and Kurt (2020) study how Turkish EFL teachers think about the factors that affect merging technology, highlighting how important teachers are in making this happen. In 2022, Mafenya looks at how technology can help teach and learn in a way that is sustainable during the COVID-19 pandemic. He shows how digital tools can simplify distance learning and interactive classroom tasks.

Technology gives numerous educational benefits, including improved instruction and learning and fostering collaboration, creativity, and learner engagement. Teachers play a vital role in using technology to create vigorous learning environments that meet the needs of students in the twenty-first century. Through adopting and comprehending technology, educators can transform how students learn and equip them to succeed in an increasingly digital society.

References:

Adhikari, Y. (2021). Integrating technology into English language teaching in Nepal: student and teacher perspectives. *Prithvi Academic Journal*, 4, 107-120. <https://doi.org/10.3126/paj.v4i0.37052>

Ali, N. (2024). An investigation into the impact of educational technology on the teaching-learning process in higher education. *International Research Journal of Innovations in Engineering and Technology*, 08(05), 142-149. <https://doi.org/10.47001/irjiet/2024.805022>

Aprilo, I., Arfanda, P., Mappaompo, M., & Saleh, M. (2023). Technology adaptation in 21st century physical education learning: literature review. *Jurnal Dunia Pendidikan*, 3(2), 102-107. <https://doi.org/10.55081/jurdip.v3i2.858>

Chacón-Prado, M. (2023). Technology integration in the classroom: a literature review. *Revista Espiga*, 22(45), 20-38. <https://doi.org/10.22458/re.v22i45.4598>

Chomunorwa, S., Mashonganyika, E., & Marevesa, A. (2022). Educator perspectives on the use of technology in schools in previously disadvantaged communities. *South African Computer Journal*, 34(2). <https://doi.org/10.18489/sacj.v34i2.1088>

Gcabashe, N. and Ndlovu, N. (2022). Exploring business studies teachers' technology self-efficacy on their technology integration to create learner-centred teaching environment. *International Journal of Learning Teaching and Educational Research*, 21(12), 238-259. <https://doi.org/10.26803/ijlter.21.12.13>

Mafenya, N. (2022). Exploring technology as enabler for sustainable teaching and learning during covid-19 at a university in south africa. *Perspectives in Education*, 40(3), 212-223. <https://doi.org/10.18820/2519593x/pie.v40.i3.14>

Oke, A. and Fernandes, F. (2020). Innovations in teaching and learning: exploring the perceptions of the education sector on the 4th industrial revolution (4ir). *Journal of Open Innovation Technology Market and Complexity*, 6(2), 31. <https://doi.org/10.3390/joitmc6020031>

Pathirana, A. (2023). Teachers' agency in technology for education in pre- and post-covid-19 periods: a systematic literature review. *Education Sciences*, 13(9), 917. <https://doi.org/10.3390/educsci13090917>

Pragasam, J. and Sulaiman, N. (2023). Integrating technology in esl reading classroom: accounting pupils' perspectives. *Arab World English Journal*, (1), 324-342. <https://doi.org/10.24093/awej/comm1.23>

Rafalow, M. and Puckett, C. (2022). Sorting machines: digital technology and categorical inequality in education. *Educational Researcher*, 51(4), 274-278. <https://doi.org/10.3102/0013189x211070812>

Sastre, M., Pifarré, M., Cujba, A., Cutillas, L., & Falguera, E. (2022). The role of digital technologies to promote collaborative creativity in language education. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.828981>

Tuma, F. (2021). The use of educational technology for interactive teaching in lectures. *Annals of Medicine and Surgery*, 62, 231-235. <https://doi.org/10.1016/j.amsu.2021.01.051>

Yu, H., Shi, G., Li, J., & Yang, J. (2022). Analyzing the differences of interaction and engagement in a smart classroom and a traditional classroom. *Sustainability*, 14(13), 8184. <https://doi.org/10.3390/su14138184>

Önalın, O. and Kurt, G. (2020). Exploring turkish efl teachers' perceptions of the factors affecting technology integration: a case study. *Journal of Language and Linguistic Studies*, 16(2), 626-646. <https://doi.org/10.17263/jlls.759264>