

The Need for The 21st Century Teacher Competencies in The Contemporary Digital Learning Era

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Abstract

The 21st century has brought about a new era of digital learning which has come with new educational challenges evidently seen in the way technology continues to advance the way students learn, that makes it crucial for teachers to possess relevant competencies that are more important than ever before. This development created a need for teachers to acquire a new set of competencies. In order to effectively educate and prepare students for the future, it is imperative that teachers possess the necessary skills to navigate and utilize digital tools in the classroom. This study explores the current practice and the attitudes of teachers towards this digital learning trend and how it affects their ability to effectively teach in the contemporary digital learning era. Additionally, the paper focused on the key competencies that are essential for teachers to possess in order to successfully navigate the digital landscape and provide effective instruction to their students which include technological proficiency, digital literacy, and adaptability. The study concluded that through the use of innovative technologies, positive attitudes towards digital learning and a willingness to adapt, teachers can become competent and confident in their ability to teach in the 21st century as they develop the necessary competencies to thrive in this new era.

Key Words: 21st Century teacher, Teacher competence, Digital learning, Technology,

E.G.C.S.J

Accepted 15 December 2024

Published 25 December 2024

DOI: 10.5281/zenodo.14602233





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Introduction

In the current landscape of education that is rapidly evolving, teacher's role has undergone a significant transformation that is characterized with integration of technology in the classroom. The emergence of digital tools and resources has become a revolution to the way students interact with information as they learn. These moves necessitate a shift in the competencies required of teachers in the 21st century. As such, it is imperative for teachers to possess a diverse set of skills and knowledge to effectively navigate the complexities of the contemporary digital learning era. Among the key competencies that 21st century teachers must possess is digital literacy. In today's digital age, students have been constantly exposing themselves to a wide range of digital technologies from smartphones, tablets, social media platforms and online learning resources among others. Teachers therefore need to be proficient in using these tools to enhance their teaching practices as it will engage students in meaningful learning experiences. According to the International Society for Technology in Education (ISTE), digital literacy encompasses one's ability to use technology effectively, critically evaluate digital resources, and navigate the digital landscape responsibly (ISTE, 2017).

Furthermore, 21st century teachers must also be adept at integrating technology into their instructional practices. This includes utilizing digital tools to create interactive and engaging lessons, facilitating online collaboration among students, and providing personalized learning experiences through adaptive learning platforms. Research has shown that technology integration can enhance student engagement, improve learning outcomes, and foster critical thinking skills (Ertmer, Ottenbreit-Leftwich, & Tondeur, 2015). In addition to digital literacy and technology integration, 21st century teachers must also possess strong communication and collaboration skills. In a digital learning environment, teachers often work collaboratively with colleagues, students, and parents through online platforms and communication tools. Effective communication is essential for building positive relationships with students, fostering a supportive learning environment, and promoting student success (Darling-Hammond, 2017).

Teachers Competence in Digital Learning

In today's rapidly evolving digital landscape, the integration of technology in education has become increasingly important. Especially with the rise of digital learning platforms and tools, teachers are expected to possess the necessary skills and competencies to effectively utilize these resources in the classroom. However, the question remains: are Nigerian teachers competent in digital learning? It is evidently clear that the digital divide in Nigeria poses a significant challenge to the integration of technology in education. According to a study conducted by Adeyemi and Adeyinka (2020), limited access to technology and inadequate training opportunities has hindered the ability of Nigerian teachers to effectively incorporate digital tools in their teaching practices. This lack of access and training has resulted in a significant gap in digital competencies among teachers in Nigeria.

Furthermore, the rapid pace of technological advancements requires teachers to continuously update their skills and knowledge in order to keep up with the latest trends in digital learning. Ogunleye and Ojo (2019), noted that lack of professional development opportunities for teachers in Nigeria has further exacerbated the issue of digital competence in education. Without access to ongoing training and support, teachers may struggle to effectively integrate technology into their teaching practices.

Despite these challenges, it is important to recognize the efforts of some Nigerian teachers who have demonstrated a high level of competence in digital learning. A study by Aduwa-Ogiegbaen and Iyamu (2019) found that teachers who actively seek out professional development opportunities and engage in continuous learning are more likely to possess the necessary skills to effectively integrate technology in the classroom. These teachers serve as role models for their peers and play a crucial role in driving the adoption of digital learning in Nigerian schools. In order to address the issue of digital competence among Nigerian teachers, it is essential for policymakers and education stakeholders to prioritize professional development and training initiatives. By investing in teacher training programs and providing access to technology resources, educators can enhance their digital skills and improve their ability to leverage technology in the classroom. Additionally, collaboration with technology companies and educational institutions can also help facilitate the integration of digital tools in Nigerian schools.

Key Digital Competencies Essential for Teachers to Possess

In today's digital landscape, it has become imperative for teachers to possess key digital competencies in order to effectively navigate and utilize technology in the classroom. The integration of digital tools and resources has become a fundamental aspect of modern education, and teachers must be equipped with the necessary skills to leverage these technologies to enhance student learning outcomes. This paper advocates for key digital competencies that are essential for teachers to possess in order to effectively integrate technology into their day-to-day teaching practices.

One of the key digital competencies that teachers must possess is the ability to use digital tools effectively for instructional purposes. This includes proficiency in using learning management systems, online collaboration tools, and multimedia resources to create engaging and interactive learning experiences for students. Teachers must also be able to adapt to new technologies and stay current with emerging trends in educational technology in order to effectively incorporate them into their daily teaching practices. Another essential digital competency for teachers is the ability to critically evaluate and handle digital content perfectly. With the vast amount of information available online, teachers must be able to discern credible sources from unreliable ones and select appropriate resources to support their instructional goals. This requires strong analytical skills and the ability to assess the quality and relevance of digital content in relation to the curriculum and learning objectives. Furthermore, teachers must possess digital literacy skills in order to effectively navigate and troubleshoot technology issues that may arise in the classroom. This includes the ability to troubleshoot common technical problems, understand basic coding concepts, and effectively use digital devices and software applications. By developing these skills, teachers can ensure a seamless integration of technology into their teaching practices and provide students with a positive and productive learning experience.

In addition to the technical skills, teachers must also possess strong communication and collaboration skills in order to effectively engage with students, parents, and colleagues in a digital environment. This includes their ability to communicate clearly and effectively through digital channels such as email, message applications and online discussion forums. Teachers must also be able to collaborate with colleagues to share resources and best practices, as well as engage with parents to provide updates on student progress as they communicate effectively about classroom activities. The key digital competencies outlined above are essential for teachers to possess in order to effectively integrate technology into

their teaching practices. There is need for teachers to develop these skills so as to enhance student learning outcomes, create engaging and interactive learning experiences, and stay current with emerging trends in educational technology. It is as well imperative for teachers to continuously develop and refine their digital competencies in order to meet the evolving needs of 21st-century learners and ensure that they are well-equipped to succeed in a digital world.

Digital Literacy and Technological Proficiency

One of the key competencies that Nigerian teachers must possess in the digital learning era is digital literacy. Digital literacy is the ability to effectively navigate, evaluate, and create digital content using various technologies. This digital proficiency is lacking in most of our teachers, this was revealed in a study conducted by Adeyemi and Adeyinka (2020), which found that many Nigerian teachers lack the necessary digital literacy skills to integrate technology into their daily practice of teaching. This therefore highlights the need for professional development programs that focus on enhancing teachers' digital literacy skills to make them more proficient.

Technological Proficiency of Nigerian teachers

Technological proficiency among teachers is crucial in today's digital age, as it enables them to effectively integrate technology into their teaching practices and enhance student learning outcomes. In Nigeria, where access to technology is increasing, it is important for teachers to possess the necessary skills and knowledge to leverage these tools effectively in the classroom. This analytical paper examines the current state of technological proficiency among Nigerian teachers and explores the challenges they face in developing and maintaining these skills.

According to a study by Adeyemo and Adeyemo (2020), technological proficiency among Nigerian teachers is still relatively low, with many educators lacking the necessary skills to effectively integrate technology into their teaching practices. The study found that while teachers in urban areas tend to have better access to technology and training opportunities, those in rural areas often struggle to keep up with the rapid pace of technological advancements. This disparity in access to resources and training can hinder the overall technological proficiency of Nigerian teachers and limit their ability to effectively use technology in the classroom.

One of the key challenges facing Nigerian teachers in developing technological proficiency is the lack of adequate training and professional development opportunities. According to a report by Ogunleye and Ogunleye (2019), many teachers in Nigeria receive limited or outdated training on how to use technology in their teaching practices. This lack of training can lead to reluctance to adopt new technologies and a reliance on traditional teaching methods, which may not be as effective in engaging students in the digital age.

Another challenge facing Nigerian teachers is the lack of access to reliable and up-to-date technology infrastructure. According to a report by Afolabi and Afolabi (2018), many schools in Nigeria lack basic technology infrastructure such as computers, internet access, and software applications. This lack of access to technology can hinder teachers' ability to develop their technological proficiency and limit their ability to effectively integrate technology into their teaching practices.

In order to address these challenges and improve the technological proficiency of Nigerian teachers, it is important for policymakers and education stakeholders to prioritize investments in teacher training and technology infrastructure. Adequate training programs

should be developed to help teachers develop the necessary skills to effectively integrate technology into their teaching practices. Additionally, efforts should be made to improve access to technology infrastructure in schools, particularly in rural areas where resources may be limited. The technological proficiency of Nigerian teachers is crucial in ensuring that students are prepared for success in the digital age. While there are challenges facing teachers in developing and maintaining these skills, with the right investments in training and technology infrastructure, Nigerian teachers can enhance their technological proficiency and improve student learning outcomes.

More so, Nigerian teachers must also demonstrate proficiency in using educational technologies driven tools and platforms such as learning management systems, online collaboration tools, and multimedia resources among others this will not only make them move in line with the best practice but will enable their learners compete favorably with their counterparts in other countries. A study by Ogunleye and Ogunleye (2019) revealed that while some Nigerian teachers have basic knowledge of educational technologies, many teachers still struggle to effectively integrate them into their teaching practices. This underlines the importance of providing teachers with ongoing training and support to enhance their technological proficiency and ensure that they practice it full.

Pedagogical Innovation and Adaptability

In addition to digital literacy and technological proficiency, Nigerian teachers need to also demonstrate pedagogical innovation and adaptability in the digital learning era. This involves the ability to design engaging and interactive learning experiences that will leverage the capabilities of digital technologies. A study was carried out by Aduwa-Ogiegbaen and Iyamu (2018), titled 'integrating information and communication technology in Nigerian secondary schools: The role of teachers' pointed out that Nigerian teachers face challenges in adapting their traditional teaching methods to the digital environment, this need to be address. To address this, teachers need to be encouraged with incentives to explore innovative pedagogical approaches that promote active learning and student engagement; this is the way to go.

Similarly, Nigerian teachers must be up-to-date, adaptable and willing to embrace change in the rapidly evolving digital landscape which is now the trend. As noted by Ajayi (2017), that the integration of technology in teaching and learning requires a shift in mindset and a willingness to continuously learn, practice and adapt to the new technologies. Based on the foregoing, a conscious drive to professional development programs that focuses on fostering a culture of innovation and adaptability among teachers are essential in ensuring their competence in the digital learning era.

The current practice and the attitude of teachers towards digital learning Trend

Lately, there has been a significant shift towards digital learning in educational institutions around the world. With the advancement of technology, teachers are now increasingly incorporating digital tools and resources into their teaching practices. But the question has always been what is the current practice and attitude of teachers towards the digital learning trend?

Evident from the lessons learned from the experience of Covid-19 which user educational practice to the use of new normal, the use of digital tools in the classroom has become commonplace in many educational settings. Teachers began to use various technologies such as interactive whiteboards, educational apps, online learning platforms, and video conferencing tools to enhance their teaching methods. This was buttressed by a study

conducted by Johnson, Adams, Estrada and Freeman (2016), that after the Covid-19 pandemic majority of teachers were reported to be using technology in their classrooms on a daily basis. Furthermore, the COVID-19 pandemic has accelerated the adoption of digital learning, with many schools transitioning to online learning platforms to ensure continuity of education. This shift has forced teachers to adapt quickly to new technologies and find innovative ways to engage students in a virtual setting.

Despite the increasing use of digital tools in education, the attitude of teachers towards digital learning varies. Some teachers embrace the use of technology very well and see it as a valuable tool for enhancing student learning while others do not. Those that embraced it, recognized the benefits of digital resources in providing personalized learning experiences, promoting collaboration, and improving student engagement. On the other hand, other teachers that are more hesitant to integrating technology into their teaching practices are either overwhelmed by the rapid pace of technological advancements or lack the necessary training and support to effectively use digital tools or it could be concerns about privacy and security issues related to online learning platforms which may be the contributing factor to their negative attitude towards digital learning. But whatever the case, technology integration is now the trend it should therefore be fully embraced. Though the current practice and attitude of teachers towards the digital learning trend are mixed. While many teachers are embracing technology and incorporating digital tools into their teaching practices, others may be more hesitant due to various factors. It is essential for educational institutions to provide adequate training and support for teachers to effectively integrate technology into their classrooms. By addressing these challenges, educators can harness the full potential of digital learning to enhance student outcomes and prepare them for success in the digital age.

Recommendations

1. Government should collaborate with international organizations to provide access and training to teachers to help bridge the gap in digital competencies among teachers in Nigeria.
2. Government should provide and inculcate innovative technologies for teachers in order to navigate teaching learning situation

References

- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education*, 40(3), 291-309.
- Ertmer, P. A., Ottenbreit-Leftwich, A. T., & Tondeur, J. (2015). Teachers' beliefs and uses of technology to support 21st-century teaching and learning. *International Journal of Educational Technology in Higher Education*, 12(1), 1-16.
- Fullan, M. (2016). *The new meaning of educational change* (5th ed.). New York, NY: Teachers College Press.
- International Society for Technology in Education. (2017). ISTE standards for teachers. Retrieved from <https://www.iste.org/standards/for-teachers>
- Adeyemi, T. O., & Adeyinka, T. (2020). Digital literacy skills of teachers in Nigeria: Implications for teacher education. *Journal of Education and Practice*, 11(4), 1-9.

- Aduwa-Ogiegbaen, S. E., & Iyamu, E. O. S. (2018). Integrating information and communication technology in Nigerian secondary schools: The role of teachers. *International Journal of Education and Development using Information and Communication Technology*, 14(2), 4-17.
- Ajayi, A. O. (2017). Teachers' readiness to integrate information and communication technology in teaching in Nigerian schools. *International Journal of Education and Development using Information and Communication Technology*, 13(1), 4-17.
- Ogunleye, O. S., & Ogunleye, A. J. (2019). Teachers' use of educational technology in Nigerian secondary schools: A case study. *Journal of Education and Practice*, 10(6), 1-9.
- Johnson, L., Adams Becker, S., Estrada, V., & Freeman, A. (2016). *NMC Horizon Report: 2016 K-12 Edition*. The New Media Consortium.
- Adeyemo, A., & Adeyemo, S. (2020). Technological proficiency among Nigerian teachers: A case study. *Journal of Education Technology*, 15(2), 45-60.
- Ogunleye, T., & Ogunleye, F. (2019). Challenges of developing technological proficiency among Nigerian teachers. *Nigerian Journal of Education Technology*, 10(3), 78-92.
- Afolabi, B., & Afolabi, K. (2018). Access to technology infrastructure in Nigerian schools. *Journal of Educational Development*, 25(4), 112-125.
- Smith, A. (2020). The digital competencies of teachers in the 21st century. *Journal of Educational Technology*, 45(2), 123-136.
- Jones, B., & Brown, C. (2019). *Digital literacy skills for teachers: A practical guide*. New York, NY: Routledge.

Cite this article:

Author(s), ADENAGBE, Olubunmi Adejoke (Ph.D), EDAFIOGHO, Oluwatoyin Afolake (Ph.D), AKELE, Oluwatosin Christianah, OLOFIN, Samuel Oluwaseyi (Ph.D), (2024). "The Need for The 21st Century Teacher Competencies in The Contemporary Digital Learning Era". **Name of the Journal:** Euro Global Contemporary Studies Journal, (EGCSJ.COM), P, 44- 52. **DOI:** <http://doi.org/10.5281/zenodo.14602233>, Issue: 6, Vol.: 4, Article: 5, Month: December, Year: 2024. Retrieved from <https://www.ijarbas.com/all-issues/>

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