

PROMOTION OF DIGITAL SKILLS IN ECONOMICS TEACHERS IN NIGERIAN SECONDARY SCHOOLS: BENEFITS AND CHALLENGES

By

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Abstract

The increasing integration of digital technologies into education has made digital skills an essential requirement for effective teaching and learning. In Nigerian secondary schools, Economics as a subject requires analytical reasoning, data interpretation, and real-world application, all of which can be enhanced through the use of digital tools. This paper examines the promotion of digital skills among Economics teachers in Nigerian secondary schools, focusing on the benefits, challenges, and implications for teaching effectiveness. Adopting a position paper approach, the study reviews existing literature, educational policies, and practical experiences to present an informed argument on the need for digital competence among Economics teachers. The paper argues that digital skills improve instructional delivery, student engagement, assessment practices, and professional development. However, challenges such as inadequate infrastructure, limited training opportunities, high cost of digital resources, and resistance to change hinder effective implementation. The study concludes that deliberate policy actions and sustained investment are necessary to promote digital skills and improve the quality of Economics education in Nigeria.

Keywords: Capacity building, Economics programme, Teachers

1.0 Introduction

In the 21st century, digital technology has become an essential component of teaching and learning. The global shift towards digital education has highlighted the importance of equipping teachers with the necessary digital skills to effectively integrate technology into the classroom. In Nigeria, secondary school education faces unique challenges, including outdated teaching methods, limited access to digital resources, and low teacher competency in using technology.

Economics, as a subject, requires analytical thinking, data interpretation, and understanding of complex financial systems. Integrating digital tools such as online simulations, data analysis software, and virtual learning platforms can enhance the teaching and learning of Economics. Promoting digital skills among Economics teachers is therefore critical to improving instructional quality, fostering student engagement, and preparing learners for a technology-driven global economy.

This study explores the benefits and challenges of promoting digital skills in Economics teachers in Nigerian secondary schools, emphasizing the implications for teaching effectiveness and educational outcomes.

2.0 Conceptual Terms

2.1 Concept of an Economics Teacher

An Economics teacher is a professionally trained educator responsible for teaching economic concepts, principles, and theories to learners, particularly at the secondary school level. The teacher interprets the Economics curriculum and translates abstract economic ideas such as scarcity, choice, demand and supply, market structures, inflation, and economic growth into understandable learning experiences for students (Ogunode, & Abubakar, 2020; Ogunode, 2020).

Beyond content delivery, an Economics teacher plays a critical role in developing students' analytical thinking, problem-solving skills, and understanding of real-life economic issues. This involves the use of appropriate teaching strategies, instructional materials, assessment techniques, and classroom management practices. In the contemporary educational environment, the role of the Economics teacher also includes integrating modern teaching approaches and technologies to enhance learning outcomes and prepare students for participation in a dynamic and globalized economy (Nwarie, 2019; Ogunode, & Paiko, 2021).

2.2 Concept of Digital Skills

Digital skills refer to the ability to use digital technologies, tools, and platforms effectively, efficiently, and responsibly for communication, learning, problem-solving, and productivity. In education, digital skills include competencies such as using computers and mobile devices, navigating the internet, operating educational software, managing digital content, and utilizing online learning platforms for teaching and assessment (Study.com 2023; Rodríguez, 2024; Ogunode, 025). Digital skills is the ability to find, evaluate, use, share and create content using digital devices such as computers and smartphones. In the academic environment, digital skills required for teaching, researching and provision of community services. Tertiary institutions are expecting the vast majority of their staff to have them, not just a select few. Technology is at the

center of our lives, and as our dependence on the internet and digital communications increases, staff in tertiary institution must keep up with the evolving skill demand (Castelán, 2023).

UNESCO's definition of digital skills is 'a range of abilities to use digital devices, communication applications, and networks to access and manage information. They enable people to create and share digital content, communicate and collaborate, and solve problems for effective and creative self-fulfillment in life, learning, work, and social activities.' Academic staff that learn digital skills not only make themselves more effective but future-proof their career by understanding key digital channels and useful AI tools. Digital skills are skills and knowledge that allow for the **appropriate use of technological tools**, both in the personal and professional spheres. These skills allow people to enhance their employability, productivity, creativity and professional resilience (Castelán, 2023). Digital skills is the ability to practically use the internet confidently on a mobile phone, tablet, laptop or PC, confidence to use systems at work such as Outlook, Power-point and Excel. Digital skills is the ability and capacity to use digital devices to keep digital records of students, to do an online education and safety course and when communicating with teammates. Digital skills is the ability to communicate online using email, social media or other tools like Zoom and Teams, searching for reliable information online (Ogunode, 2025)e.

For teachers, digital skills extend to designing digital instructional materials, using multimedia resources, conducting online assessments, analyzing digital data on student performance, and ensuring safe and ethical use of technology. Digital skills also encompass basic cybersecurity awareness, digital communication, and information literacy. In the context of secondary school education in Nigeria, digital skills are essential for improving teaching effectiveness, enhancing student engagement, and supporting the successful integration of technology into classroom instruction.

3.0 Methodology

This study adopts a **position paper methodology**, which emphasizes critical analysis and reasoned argument based on existing evidence rather than primary data collection. The position paper approach is suitable for this study as it allows the researcher to evaluate current practices and policies related to digital skill development among Economics teachers in Nigerian secondary schools.

The study is based on secondary sources such as academic journals, policy documents, curriculum guidelines, government reports, and relevant educational literature. These sources were analyzed to identify the benefits, challenges, and gaps in the promotion of digital skills among teachers. Through synthesis of existing knowledge, the paper presents a clear stance advocating for structured digital skill development as a strategy for improving Economics teaching and learning outcomes.

4.0 Result and Discussion on Benefits of Promoting Digital Skills in Economics Teachers

Improved Teaching Effectiveness

Digital skills allow teachers to incorporate interactive learning tools, multimedia presentations, and online simulations into Economics lessons. This enhances the clarity of complex concepts like demand-supply analysis, market structures, and fiscal policy, making lessons more engaging and effective. Promoting digital skills among Economics teachers significantly enhances teaching effectiveness. Digital competencies enable teachers to utilize multimedia resources, interactive simulations, virtual charts, and online economic models to explain abstract economic concepts such as demand and supply, inflation, market structures, and national income analysis. These tools support clearer explanations, reduce teacher-centered instruction, and promote learner-centered approaches. Additionally, digital tools allow teachers to access up-to-date economic data, global case studies, and policy reports, thereby enriching lesson content and improving instructional quality. As a result, Economics instruction becomes more relevant, dynamic, and aligned with real-world economic issues.

Enhanced Student Engagement and Learning Outcomes

Teachers with digital skills can use e-learning platforms, educational apps, and interactive graphs to stimulate students' interest. Active engagement leads to better understanding, retention, and application of economic concepts in real-world contexts. Digital skills among Economics teachers promote greater student engagement and improved learning outcomes. Through the use of digital platforms such as virtual classrooms, educational apps, interactive quizzes, and online discussion forums, teachers can actively involve students in the learning process. These tools stimulate learners' interest, encourage critical thinking, and support collaborative learning. Furthermore, digital instructional strategies accommodate diverse learning styles, enabling students to learn at their own pace. Studies have shown that increased learner engagement facilitated by digital tools positively influences academic achievement and knowledge retention in Economics.

Efficient Assessment and Feedback

Digital tools enable teachers to administer online quizzes, collect data on student performance, and provide instant feedback. This fosters personalized learning and allows for timely interventions to support struggling students. The promotion of digital skills among Economics teachers improves the efficiency of assessment and feedback mechanisms. Digital assessment tools such as online tests, automated grading systems, and learning management systems allow teachers to evaluate students' performance accurately and promptly. These tools reduce the burden of manual grading and enable continuous assessment. Moreover, digital platforms facilitate timely and personalized feedback, which helps students identify their strengths and areas for improvement. Efficient

assessment practices contribute to better monitoring of learning progress and informed instructional decision-making.

Professional Development and Collaboration

Teachers skilled in digital technologies can participate in online workshops, webinars, and professional learning networks. This enhances their knowledge, facilitates collaboration with peers, and exposes them to innovative teaching methods. Digital skills enhance professional development and collaboration among Economics teachers. Teachers with strong digital competencies can participate in online training programmes, webinars, virtual conferences, and professional learning communities. These platforms provide opportunities for continuous skill enhancement, exposure to innovative teaching practices, and exchange of ideas with colleagues locally and internationally. Collaboration through digital networks also promotes peer mentoring, joint research activities, and curriculum development. Consequently, digital skills contribute to the professional growth and adaptability of Economics teachers in a rapidly changing educational environment.

Preparation for a Technology-Driven Economy

By integrating digital tools into Economics teaching, teachers help students develop critical digital competencies, preparing them for higher education and the demands of the modern workforce. Promoting digital skills among Economics teachers plays a critical role in preparing students for a technology-driven economy. Teachers who are digitally competent can integrate technology-related economic concepts such as digital markets, e-commerce, financial technology (fintech), and data-driven decision-making into classroom instruction. This exposure equips students with relevant skills, economic literacy, and digital awareness required in modern workplaces. By modeling effective technology use, Economics teachers also foster students' digital competencies, thereby enhancing their employability and readiness for participation in the global digital economy.

B.-Challenges of Promoting Digital Skills in Economics Teachers

Limited Access to Digital Infrastructure

Limited access to digital infrastructure remains one of the most significant challenges to promoting digital skills among Economics teachers in Nigeria. Many secondary schools, particularly public and rural schools, lack basic technological facilities such as functional computers, interactive boards, projectors, and reliable internet connectivity. In some cases, available equipment is obsolete, poorly maintained, or insufficient to meet the needs of both teachers and students. Frequent power outages further compound the problem, making consistent use of digital tools difficult. Without adequate infrastructure (Ogunode, Ayoko, O & Orifah, 2023), Economics

teachers are unable to practice, experiment with, or integrate digital teaching methods into their instructional delivery. This situation discourages innovation and reinforces dependence on traditional chalk-and-talk methods, thereby limiting the effectiveness of digital skill acquisition and application. Many secondary schools in Nigeria lack computers, internet connectivity, and projectors. Without access to essential technology, teachers cannot effectively practice or apply digital skills (Eshet-Alkali, & Amichai-Hamburger, 2004)..

Inadequate Training and Capacity Building

Another major challenge is the inadequacy of training and capacity-building programmes for Economics teachers. Professional development opportunities related to digital skills are often irregular, poorly funded, and not aligned with contemporary technological trends. Many training workshops focus on basic computer literacy rather than advanced digital competencies such as the use of data analysis software, virtual learning environments, online assessment tools, and digital content creation platforms relevant to Economics teaching (Ogunode, 2025). In addition, there is limited follow-up support after training sessions, which affects sustained skill development and practical classroom application (Castelán, 2023). As a result, many Economics teachers lack confidence and competence in using digital tools effectively, reducing the overall impact of digitalization initiatives in secondary education. Professional development programs for Economics teachers are often insufficient, irregular, or outdated. Teachers may lack exposure to modern educational software, data analysis tools, and e-learning platforms (Dhawan, 2023)..

Resistance to Change

Resistance to change among Economics teachers also poses a significant barrier to the promotion of digital skills. Some teachers are hesitant to adopt digital teaching methods due to fear of technology, lack of confidence, or anxiety about making mistakes in front of students. Others are deeply attached to traditional instructional approaches that they have used for many years and perceive digital methods as unnecessary or overly complex. This resistance may also stem from inadequate institutional support, lack of incentives, and increased workload associated with learning new technologies (Ogunode, Ayoko, & Orifah, 2023).. When teachers are not adequately motivated or supported, they may view digital innovation as a burden rather than an opportunity, thereby slowing the pace of digital transformation in Economics education. Some teachers are reluctant to adopt digital teaching methods due to fear of technology, unfamiliarity, or attachment to traditional teaching practices (Aviram, & Eshet-Alkalai, 2006).

High Cost of Digital Tools

Software licenses, devices, and internet subscriptions can be expensive. Many schools, particularly in rural areas, cannot afford these resources, limiting opportunities for teachers to develop and

apply digital skills. The high cost of digital tools constitutes another major challenge in promoting digital skills among Economics teachers (Ogunode, Abdulrazak, & Abubakar, 2023).. The acquisition and maintenance of computers, tablets, projectors, and smart boards require substantial financial investment. In addition, recurring expenses such as software licenses, internet subscriptions, system upgrades, and technical support further strain limited school budget (Ogunode, & Ndayebom, 2023s. Many public secondary schools in Nigeria, especially those in rural and underserved communities, cannot afford these costs due to inadequate funding (Ogunode, N, J., Olowonefa & Ukozor. 2025).. Consequently, Economics teachers in such schools have limited opportunities to access and use digital resources for teaching and professional development. This financial constraint widens the digital divide between urban and rural schools and undermines efforts to achieve equitable access to quality digital education. (Adeoye Adeoye, 2017).

Cybersecurity and Data Privacy Concerns

Teachers may be hesitant to use digital platforms due to fears of data breaches, identity theft, or exposure to inappropriate online content.

Time Constraints

Economics teachers often face heavy workloads and may find it challenging to allocate time for learning and integrating digital skills into their teaching practice.

4.1 Conclusion and Recommendations

Promoting digital skills in Economics teachers in Nigerian secondary schools presents significant opportunities for enhancing teaching quality, increasing student engagement, and preparing learners for a digital economy. The integration of technology into Economics lessons improves instructional methods, enables efficient assessment, and encourages professional development. However, challenges such as inadequate infrastructure, limited training, resistance to change, high costs, cybersecurity concerns, and time constraints can hinder progress.

To maximize the benefits, policymakers and educational stakeholders must invest in digital infrastructure, provide regular and comprehensive training programs, create supportive learning environments, and address financial and security barriers. By overcoming these challenges, Nigeria can empower Economics teachers with the digital competencies necessary to deliver effective, modern, and innovative education to secondary school students.

The promotion of digital skills among Economics teachers in Nigerian secondary schools is crucial for enhancing teaching effectiveness and preparing students for a digitally driven economy. Digital competence enables teachers to adopt innovative instructional strategies, engage students actively,

and conduct efficient assessment and feedback. Despite these benefits, the integration of digital skills faces challenges such as poor infrastructure, insufficient training, financial constraints, and resistance to technological change. Addressing these challenges requires a coordinated effort among government agencies, school administrators, and teachers. With appropriate support and policy direction, digital skills development can significantly improve the quality of Economics education in Nigeria.

Based on the discussion, the following recommendations are proposed:

1) Government Investment in Infrastructure:

Federal and state governments should provide adequate digital infrastructure, including reliable electricity, internet connectivity, and ICT facilities in secondary schools.

2) Regular Training and Capacity Building:

Continuous professional development programs should be organized to train Economics teachers in the use of digital tools and instructional technologies.

3) Curriculum Integration:

Digital competence should be integrated into teacher education and in-service training curricula to ensure sustainability.

4) Provision of Digital Resources:

Schools should be supported with relevant educational software, online resources, and teaching aids for Economics instruction.

5) Incentives and Motivation:

Teachers who demonstrate effective use of digital tools should be encouraged through incentives, recognition, and career advancement opportunities.

6) Monitoring and Support Systems:

Educational authorities should establish monitoring mechanisms to ensure effective implementation and provide technical support where necessary.

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