



Overcoming Technological and Institutional Barriers to Blended Learning Adoption in Teacher Training: A Case Study of Kwara State College of Education Oro

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Abstract

This study investigates the technological and institutional barriers to blended learning adoption at Kwara State College of Education Oro, employing descriptive survey research of a mixed design. A sample of 641 participants, comprising students and lecturers, was selected using simple random sampling. Data were collected through structured and unstructured questionnaires administered via Google Forms, focusing on assessing technological constraints, institutional policies, and digital literacy levels. Findings revealed significant barriers, including inadequate ICT infrastructure, insufficient digital literacy among educators and students, and inconsistent power supply. Recommendations include establishing a dedicated blended learning committee, developing clear institutional policies, and enhancing digital literacy training. The study concludes that addressing these barriers is crucial for successfully implementing blended learning, ultimately improving educational outcomes and preparing future educators for modern classrooms. By fostering a supportive environment, Kwara State College of Education Oro can enhance the adoption of blended learning methodologies.

Key words *Technological barriers, Institutional barriers, blended learning, and Teacher training*

I. Introduction

The integration of information and communication technology (ICT) in education has significantly reshaped teaching and learning processes worldwide. One of the most notable innovations is blended learning, which combines traditional face-to-face instruction with online learning activities. This approach is increasingly recognized for its potential to improve educational outcomes, increase access to resources, and accommodate diverse learning styles (Graham, 2013). Despite its numerous benefits, the adoption of blended learning in teacher training institutions,

particularly in developing countries like Nigeria, faces significant technological and institutional challenges. This study focuses on these challenges within the context of Kwara State College of Education Oro, a key institution responsible for preparing future educators.

Blended learning is defined as a pedagogical approach that strategically combines in-person classroom experiences with online learning activities to create a more flexible and engaging learning environment (Bonk & Graham, 2012). In the context of teacher training, blended learning offers several advantages, including the development of digital literacy skills, access to a broader range of instructional materials, and opportunities for personalized learning (Owston, 2013). However, the successful implementation of blended learning in teacher training institutions hinges on the ability to overcome various technological and institutional barriers.

Technological constraints are among the most significant challenges to blended learning adoption in teacher training institutions in Nigeria. Adeoye and Adanikin (2019) identified several technological barriers, including inadequate ICT infrastructure, unreliable internet connectivity, and limited access to digital devices. These challenges are particularly pronounced in rural areas, where many teacher training colleges are located. Kwara State College of Education Oro, situated in a rural part of Kwara State, exemplifies these challenges. The institution struggles with inconsistent electricity supply, which hampers the use of technology in teaching and learning. Additionally, the college's limited access to high-speed internet and modern digital devices further complicates the integration of online learning components into the curriculum.

In addition to technological constraints, institutional barriers also play a critical role in hindering the adoption of blended learning. Institutional support is essential for the successful implementation of blended learning, as it requires



clear policies, adequate funding, and a commitment to ongoing professional development (Sangrà & Bates, 2011). However, many teacher training institutions in Nigeria, including Kwara State College of Education Oro, lack the necessary institutional framework to support blended learning. For instance, there is often an absence of dedicated e-learning units or departments responsible for overseeing the implementation and management of blended learning initiatives. Furthermore, insufficient budget allocation for ICT resources and the lack of clear guidelines for blended learning delivery are significant impediments.

Resistance to change is another institutional barrier that affects the adoption of blended learning in teacher training. In the study of (Fullan, 2015) it was posited that educational reforms, including the integration of ICT, often encounter resistance from educators who are accustomed to traditional teaching methods. At Kwara State College of Education Oro, this resistance may be driven by several factors, including a lack of understanding of the benefits of blended learning, concerns about the increased workload associated with online teaching, and fear of obsolescence among educators. Overcoming this resistance requires a comprehensive change management strategy that includes awareness-raising, capacity-building, and incentives for adopting innovative teaching practices.

Moreover, the socio-economic context of the students at Kwara State College of Education Oro must be considered when discussing the barriers to blended learning adoption. The findings of (Olaniyi, 2020) highlighted that many students in Nigerian teacher training institutions come from low-income backgrounds and may lack access to the necessary technology for participating in online learning activities. This digital divide exacerbates existing educational inequalities and limits the effectiveness of blended learning as a tool for enhancing educational outcomes. Addressing this issue requires targeted interventions, such as providing affordable access to digital devices and internet connectivity, as well as offering financial support to economically disadvantaged students.

Despite these challenges, there is a growing recognition of the potential benefits of blended learning in teacher training. As noted in the work of (Graham 2013), blended learning can enhance student engagement, improve learning outcomes, and better prepare future educators for the demands of modern classrooms. In the specific context of Kwara State College of Education Oro, the adoption of blended learning could significantly contribute to

the professional development of teachers who are proficient in using ICT in their teaching. This, in turn, would improve the overall quality of education in the region, particularly in rural areas where access to quality educational resources is often limited.

To overcome the technological and institutional barriers to blended learning adoption at Kwara State College of Education Oro, it is essential to adopt a multi-faceted approach. This approach should include investment in ICT infrastructure, continuous professional development for educators, and the establishment of supportive institutional policies. Specifically, there is a need to improve access to reliable electricity, high-speed internet, and modern digital devices. Additionally, the college should establish a dedicated e-learning unit responsible for coordinating blended learning initiatives and provide clear guidelines for blended learning delivery. Capacity-building programs focused on digital literacy and the pedagogical use of ICT should also be prioritized to ensure that educators are equipped with the necessary skills to effectively implement blended learning.

Furthermore, addressing the digital divide among students by ensuring access to digital devices and internet connectivity is essential for the success of blended learning. Kwara State College of Education Oro can facilitate this by implementing initiatives that provide affordable technology and financial support, such as scholarships, to economically disadvantaged students. By overcoming technological and institutional challenges, the college can foster an environment conducive to effective blended learning. This approach will enhance teacher education in Nigeria, leading to a more effective and responsive training system.

Statement of the Problems

Blended learning is recognized as a powerful tool for improving education by combining traditional and digital instructional methods. The study of (Garrison & Vaughan 2008) highlighted its potential to increase student engagement and enhance learning outcomes. In the context of teacher training, blended learning is particularly valuable as it equips future educators with the digital skills necessary for modern classrooms (Graham, 2013). However, despite its benefits, the adoption of blended learning in Nigerian teacher training institutions, especially in rural areas, faces significant challenges.

Research by (Adeoye & Adanikin, 2019) pointed out the technological barriers such as inadequate ICT infrastructure and unreliable internet



connectivity, which are prevalent in Nigerian educational institutions. In the findings of (Sangrà&Bates, 2011) emphasized that institutional support, including clear policies and adequate funding, is crucial for the successful implementation of blended learning. Additionally, (Evarest& Laura, 2011) noted the digital literacy gap among educators and students as a major obstacle to blended learning adoption in Nigeria.

Despite these studies, there is a lack of research focused on rural teacher training institutions like Kwara State College of Education Oro. Existing literature primarily addresses challenges in urban or better-resourced contexts, leaving a gap in understanding how these barriers specifically affect rural institutions. This study seeks to fill this gap by providing a detailed analysis of the technological and institutional barriers to blended learning adoption at Kwara State College of Education Oro. By addressing these unique challenges, the study aims to contribute to more effective strategies for implementing blended learning in rural teacher training institutions across Nigeria.

Purpose of the Study: The study investigated the barriers to adopting blended learning, from technological constraints and institutional policies. Specifically, the study examined:

- a. assess the technological constraints affecting the adoption of blended learning at Kwara State College of Education Oro.
- b. evaluate the impact of institutional policies on blended learning adoption at Kwara State College of Education Oro.
- c. analyze the level of digital literacy among educators and students at Kwara State College of Education Oro.
- d. develop and propose practical strategies for overcoming identified technological and institutional barriers to blended learning adoption at Kwara State College of Education Oro

Research Questions: The following research questions guided this study:

- a. What are the key technological constraints affecting the adoption of blended learning at Kwara State College of Education Oro?
- b. How do current institutional policies at Kwara State College of Education Oro impact the adoption of blended learning?
- c. What is the current level of digital literacy among educators and students at Kwara State College of Education Oro?
- d. What practical strategies can be developed and proposed to overcome the technological and

institutional barriers to blended learning adoption at Kwara State College of Education Oro?

Theoretical Framework

The theoretical framework for this study is underpinned by the Technology Acceptance Model (TAM) and Institutional Theory, which together provide a comprehensive lens through which to analyze the barriers to blended learning adoption at Kwara State College of Education Oro. The TAM, as proposed by (Davis, 1989), focuses on the individual's perceptions—specifically, the perceived usefulness and ease of use of technology—both of which are critical in determining the likelihood of adopting blended learning. This model is instrumental in understanding how technological constraints, such as inadequate infrastructure and digital literacy, might influence educators' and students' acceptance of blended learning tools. Simultaneously, Institutional Theory sheds light on the broader organizational and policy-related factors that impact adoption. It examines how normative, coercive, and mimetic pressures within the institution either facilitate or impede the integration of blended learning into the curriculum (Olaniyi, 2020). The absence of supportive policies or resistance to change within the institution can significantly hinder adoption efforts.

By synthesizing these two frameworks, the study is well-positioned to explore both the individual and institutional barriers to blended learning, offering a nuanced understanding of the challenges and paving the way for targeted interventions to enhance adoption within the college.

II. Methodology

This study employs descriptive survey research of mixed design to investigate the technological and institutional barriers to blended learning adoption at Kwara State College of Education Oro. The descriptive survey design is appropriate for this study as it allows for the collection of quantitative and qualitative data that can describe the current state of blended learning adoption identify the challenges faced by educators and students and suggest possible ways out (Sambo, 2008, p. 54).

The population for this study consists of 2,871 comprising both students and lecturers at Kwara State College of Education Oro. From this population, a sample size of 641 participants with 30 participants for the qualitative study was selected, including both students and lecturers. This sample provides a representative overview of the college



community, ensuring that the findings are generalizable to the larger population. This is in line with the Research Advisors' (2006) sample size table, which analyzed and concluded that in a population of 2,500 – 3,500 at a confidence level of 95%, and a margin of error of 3.5 a sample size of 641 respondents could be appropriately sampled. A simple random sampling technique was used to select the 641 participants. The population will be divided into two strata: students and lecturers. Proportional sampling will be employed to ensure that the number of participants from each stratum reflects their proportion in the total population. This approach ensures that both groups are adequately represented in the study.

The primary instrument for data collection was a structured questionnaire administered through Google Forms and an unstructured questionnaire, with a psychometric property was content validity and 0.82 and 0.74. The questionnaire was divided into two sections, structured and unstructured on the

aims of the study. The collected data was analyzed using both descriptive and qualitative statistical tools of Atlas. ti(thematic analysis). Descriptive statistics, including frequencies, percentages and means. The data was analyzed using Statistical Package for the Social Sciences (SPSS) software.

III. Result

The research questions were answered in qualitative and quantitative approaches. A descriptive statistical tool of percentage, mean and thematic analysis of the analysis was presented in tables and charts, making it used to answer the qualitative part. The results are presented as follows:

Research question 1: What are the key technological constraints affecting the adoption of blended learning at Kwara State College of Education Oro?

The is presented in a graphical representation:

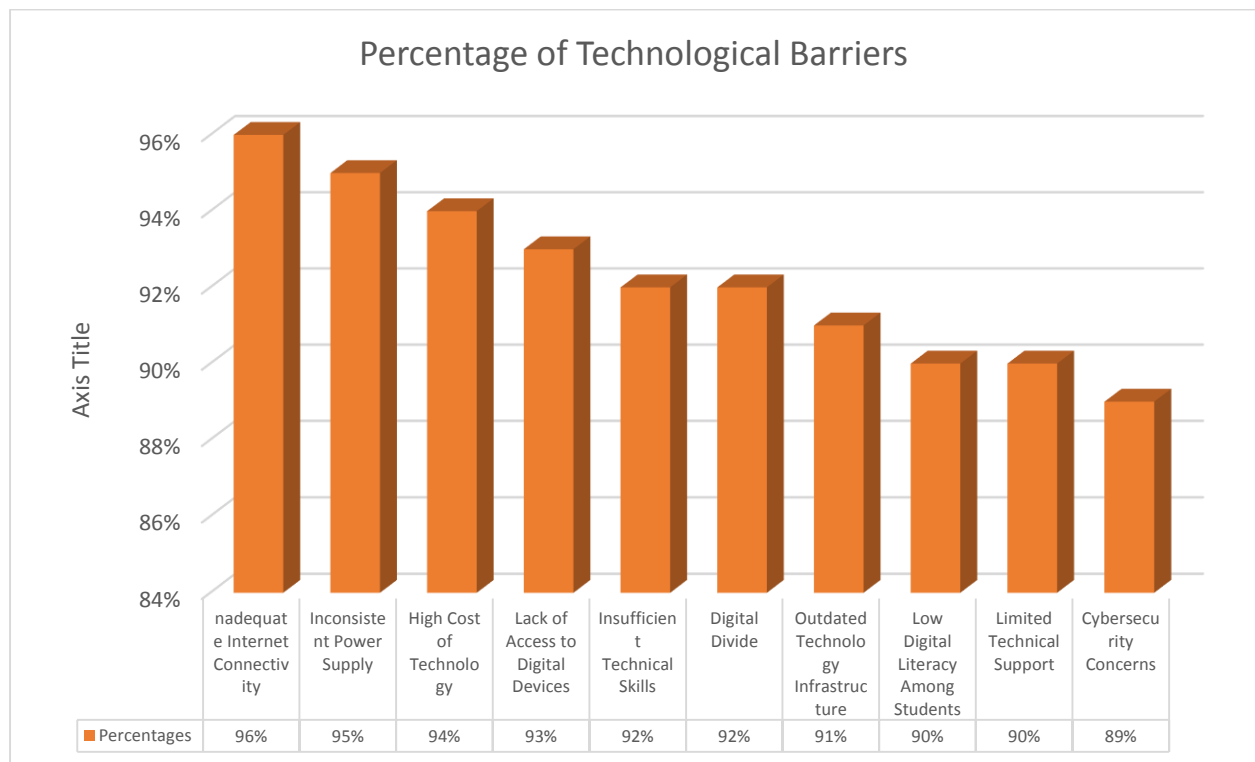


Fig 1: % of Technological Barriers

Mean % 92.2%

Figure 1; reveals mean table indicates that, on average, 92.2% of the 641 respondents at Kwara State College of Education Oro identified the listed technological barriers as significant obstacles to adopting blended teaching and learning. This high percentage demonstrates a strong consensus among

respondents regarding the impact of these barriers. With a mean frequency of 591.5, it is evident that a substantial number of respondents consistently recognized each barrier as a hindrance to the successful implementation of blended learning. This suggests that the challenges, such as inadequate



internet connectivity, inconsistent power supply, and high costs of technology, are pervasive and widely acknowledged within the institution. The close range of agreement across different barriers (89% to 96%) further emphasizes the uniformity of opinion among the respondents, indicating that no single barrier stands out as significantly less important than others. Instead, these technological barriers collectively pose a considerable challenge to the

adoption of blended learning at the institution. This widespread recognition highlights the need for comprehensive strategies to address these issues to facilitate the effective integration of blended teaching and learning methods.

Research question 2: How do current institutional policies at Kwara State College of Education Oro impact the adoption of blended learning?

This was represented:

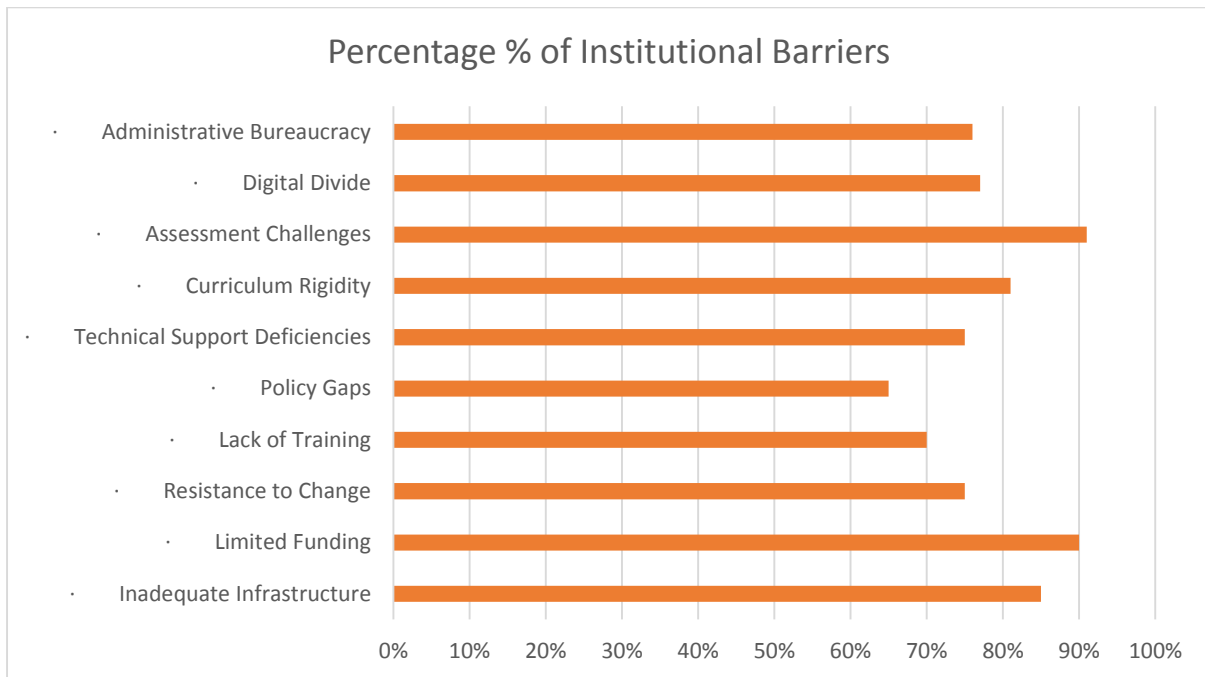


Fig. 2: Institutional Barriers

Mean =77.9%

Figure 2, revealed the mean percentage of agreement across all identified institutional barriers to the adoption of blended teaching and learning at the College of Education Oro is approximately 77.9%. This indicates that, on average, a strong majority of respondents recognize these barriers as significant challenges to the effective implementation of blended learning. The high mean percentage underscores the pervasive nature of these obstacles, suggesting that comprehensive strategies are required to address them effectively. Overall, the

data indicates that a wide range of institutional barriers are recognized by the respondents, with assessment, funding, infrastructure, and curriculum issues being the most prominent. Addressing these barriers will be essential for the successful implementation of blended learning at the college.

Research question 3: What is the current level of digital literacy among educators and students at Kwara State College of Education Oro?

This is presented in the figure three :

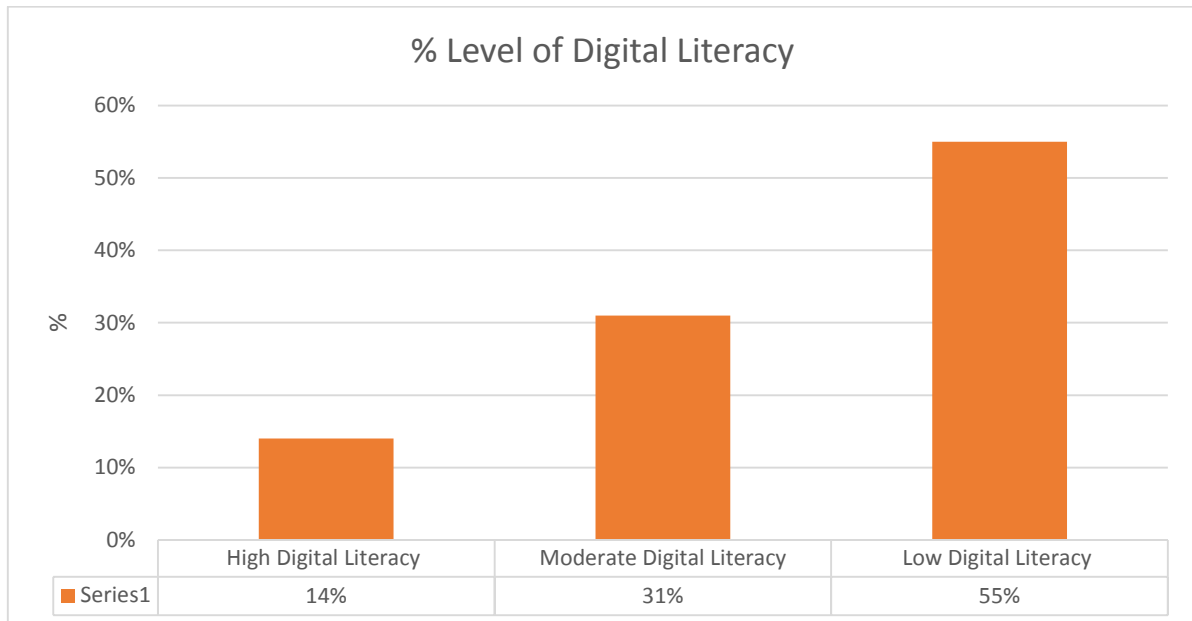


Figure 3: revealed that 55% of respondents have low digital literacy, indicating widespread difficulty with basic digital skills. Only 14% have high digital literacy, showing that very few are proficient with digital tools. The remaining 31% have moderate digital literacy, capable of basic tasks but lacking advanced skills. This highlights an urgent need to

improve digital literacy to support effective blended learning and digital initiatives at the college.

Research question 4: What practical strategies to overcome the technological and institutional barriers to blended learning adoption at Kwara State College of Education Oro?

This was presented in a qualitative form in Figure 4 and Table 1 as follows:

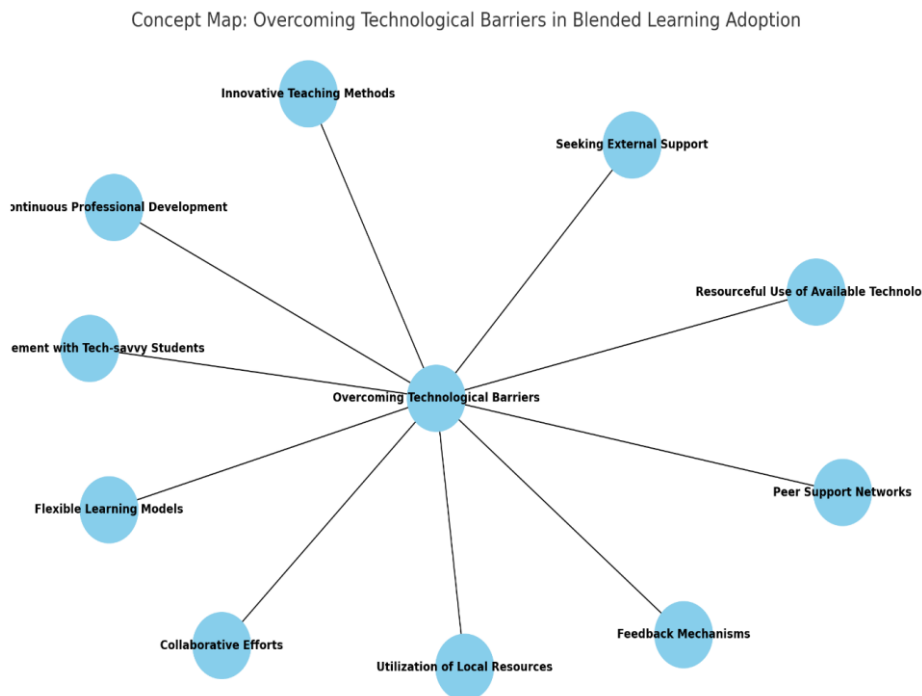


Fig.4: Technological barriers



Technological Barriers to Blended Learning Adoption in Teacher Training at Kwara State College of Education Oro

The study focused on identifying and analyzing the technological barriers to the adoption of blended learning in teacher training at Kwara State College of Education Oro. The findings revealed several critical technological challenges that impede the effective implementation of blended learning within the institution. The most prominent barrier identified was inadequate technological infrastructure. The study found that the college suffers from poor internet connectivity, which is essential for the successful integration of online and face-to-face learning methods. Participants reported frequent disruptions in internet service, making it difficult to maintain a consistent online learning environment. This issue is not unique to Kwara State College of Education Oro, as the findings of (Kilinc, Tarman & Aydin, 2018) note that unreliable internet infrastructure is a widespread problem in Nigerian educational institutions, significantly hindering the adoption of blended learning.

In addition to connectivity issues, the lack of access to digital devices emerged as a significant technological barrier. Many students and educators at the college do not have personal devices such as laptops, tablets, or smartphones, which are crucial for participating in and delivering blended learning. The study revealed that this digital divide is particularly pronounced among students from low-income backgrounds, who cannot afford the necessary technology. Thus, the finding of (Adeoye & Adanikin, 2020) highlight that the limited access to digital devices among students in Nigeria is a major obstacle to their engagement with online learning platforms. This lack of access not only affects students but also limits the ability of educators to fully integrate digital tools into their teaching practices.

Another key finding was the insufficient technical skills among both educators and students. The study participants indicated that many educators lack the necessary training and expertise to effectively use digital tools and online platforms in

their teaching. This skills gap leads to resistance or hesitation in adopting blended learning methods. (Okebukola, 2020) underscores that many educators in Nigerian institutions are not adequately equipped with the technical skills required for effective technology integration in the classroom. Similarly, students who are not digitally literate face challenges in navigating online learning environments, further complicating the adoption of blended learning.

The study also identified inconsistent power supply as a major technological barrier. Participants reported that frequent power outages disrupt online learning activities, making it difficult to maintain a consistent learning experience. This issue is particularly problematic in regions like Kwara State, where electricity supply is often unreliable. (Oye, Salleh, & Iahad 2011) point out that the erratic power supply is a significant obstacle to the implementation of e-learning in developing countries, including Nigeria. The lack of reliable backup power solutions at Kwara State College of Education Oro exacerbates this challenge, leading to doubts about the feasibility and sustainability of blended learning initiatives.

Financial constraints were also highlighted as a technological barrier. The study found that the college's limited budget restricts its ability to invest in the necessary technological infrastructure and digital tools required for blended learning. (Yusuf & Balogun, 2011) emphasize that financial constraints are a major impediment to the adoption of e-learning in Nigerian institutions, as the cost of acquiring and maintaining the necessary technology is often prohibitive. At Kwara State College of Education Oro, these financial limitations hinder the institution's ability to fully support blended learning, resulting in inadequate access to the tools and resources needed for its successful implementation.

Institutional Barriers

This was presented using a thematic analysis that shows the description and benefits highlighted by the respondents. As in table 1:

Table 1: Thematic steps, description and benefits

S/N	Step	Description	Benefits
1	Establish a Blended Learning Committee	Form a dedicated team to oversee the implementation and integration of blended learning.	Ensures focused oversight and coordination of blended learning efforts.
2	Develop and Enforce a Policy	Create formal guidelines and regulations for blended learning practices and requirements.	Provides a clear framework and standardizes practices across the institution.
3	Upgrade Technology	Invest in and install the necessary	Enhances accessibility and



4	Conduct Workshops	Training	hardware and software to support blended learning. Organize sessions for college and staff to familiarize them with blended learning techniques and tools.	functionality of technological tools used in blended learning. Improves faculty skills and confidence in delivering blended learning effectively.
5	Revise Curriculum		Integrate blended learning components into the curriculum to align with new teaching methods.	Ensures that course content is compatible with blended learning approaches and goals.
6	Monitor and Evaluate		Regularly assess the effectiveness of blended learning implementations and make necessary adjustments.	Allows for continuous improvement and adaptation based on feedback and outcomes.
7	Promote Success Stories		Share successful case studies and positive outcomes to build momentum and encourage adoption.	Motivates stakeholders by highlighting proven benefits and effective practices.
8	Secure Funding	Additional	Seek out grants, donations, or other financial support to sustain and expand blended learning initiatives.	Provides resources needed for technology upgrades, training, and other essential components.
9	Foster Partnerships	Collaborative	Develop relationships with external organizations, technology providers, and educational institutions.	Enhances resource sharing, expertise exchange, and support networks for blended learning.

Table 1 outlines a strategic approach to overcoming institutional barriers to blended learning adoption. The first step is to establish a Blended Learning Committee, which ensures that there is a dedicated team focused on overseeing and coordinating all blended learning efforts within the institution. This committee plays a crucial role in driving the initiative forward. Next, developing and enforcing a policy provides a clear framework that standardizes blended learning practices across the institution. This policy acts as a guiding document, ensuring consistency and clarity in implementation. Upgrading technology is also essential, as investing in the necessary hardware and software enhances the accessibility and functionality of the technological tools used in blended learning. This step ensures that both faculty and students have the resources they need to effectively engage with blended learning. To support faculty, conducting training workshops is vital. These sessions help improve faculty skills and confidence, enabling them to deliver blended learning effectively. As faculty become more proficient with the tools and techniques of blended learning, the quality of instruction improves. Revising the curriculum to integrate blended learning components ensures that course content aligns with new teaching methods. This step is crucial for making sure that the curriculum supports the goals of blended learning and that students are engaged in a way that complements these methods.

Continuous improvement is facilitated through regular monitoring and evaluation of blended learning implementations. This process allows the institution to make necessary adjustments based on feedback and outcomes, ensuring that the blended learning approach remains effective and relevant.

Promoting success stories is another important step, as sharing positive outcomes and case studies helps build momentum and encourages wider adoption of blended learning practices. When stakeholders see the tangible benefits, they are more likely to support and participate in these initiatives. Securing additional funding is critical for sustaining and expanding blended learning efforts. By seeking out grants, donations, or other financial support, the institution can ensure that it has the resources needed for ongoing technology upgrades, training, and other essential components.

Finally, fostering collaborative partnerships with external organizations, technology providers, and other educational institutions enhances resource sharing and support networks. These partnerships can provide valuable expertise and additional resources, further strengthening the institution's blended learning initiatives. Together, these steps form a comprehensive strategy for overcoming institutional barriers to blended learning, in Teacher education training.



IV. Discussion

The integration of blended learning into teacher training programs has increasingly gained prominence as educational institutions seek to enhance teaching effectiveness and learning outcomes. Despite the promising potential of blended learning, various barriers have emerged that challenge its successful adoption. This discussion synthesizes findings from recent research conducted at Kwara State College of Education Oro, combining insights into the challenges faced and potential solutions for overcoming these obstacles.

A significant barrier identified in the study is inadequate infrastructure. Respondents highlighted issues such as unreliable internet connectivity and inconsistent power supply as major impediments to the effective use of blended learning tools. This concern is reflected in the study's data, which shows that 92.2% of participants consider these infrastructural deficiencies as substantial obstacles. These findings are consistent with the work of (Owen, White, Palekahelu, Sumakul, & Sedyono, 2020), who identify similar infrastructural issues in developing regions, noting that they severely impact the implementation of digital education tools.

To address these technological barriers, solutions such as investing in reliable infrastructure and exploring partnerships with technology providers can be effective. Implementing community-based initiatives to improve internet connectivity and power supply could also play a crucial role. For instance, public-private partnerships have shown promise in enhancing infrastructure in various regions, as seen in projects by the World Bank and other international organizations focused on improving educational technology infrastructure (Kilinc, Tarman, & Aydin, 2018).

Another critical challenge highlighted by the study is the high cost of technology and the limited access to digital devices. The financial constraints faced by educators and students significantly hinder their ability to fully engage with blended learning. This observation aligns with findings from the International Society for Technology in Education (2022), which emphasize the prohibitive costs associated with acquiring and maintaining technological resources. The study reveals that financial constraints are a major impediment at Kwara State College of Education Oro, limiting the availability of essential ICT resources.

Overcoming financial barriers requires a multi-faceted approach. One effective strategy is the

development of targeted funding initiatives, such as grants or subsidies for educational technology. Institutions can also explore alternative funding sources, including partnerships with tech companies or non-governmental organizations that are willing to support educational advancements. For example, initiatives like the Google for Education programme offer grants and resources to schools in need (Burns, 2023). Additionally, implementing cost-sharing models where institutions collaborate on technology purchases can help alleviate financial burdens.

Institutional resistance to change poses another significant challenge. Educators who are accustomed to traditional teaching methods often express concerns about the increased workload and the potential obsolescence of their roles. The study reflects these concerns, mirroring (Fullan's, 2015) observations about the resistance to educational reforms. To address this issue, it is crucial to implement comprehensive change management strategies. This includes conducting awareness-raising initiatives, providing capacity-building programs, and offering incentives for adopting new teaching practices.

Change management strategies should also involve the creation of support networks and communities of practice. These networks can provide educators with ongoing support and resources as they transition to blended learning environments. Successful examples of such support systems can be found in various educational reforms around the world, such as the SchoolNet Africa initiative, which has fostered communities of practice to support educators in adopting new technologies (SchoolNet Africa, 2020). Additionally, incorporating feedback mechanisms to address concerns and provide continuous support can help mitigate resistance.

Digital literacy is another crucial factor influencing the effectiveness of blended learning. The study found that a significant portion of respondents reported low levels of digital literacy, which impedes their ability to engage effectively with blended learning tools. This challenge is consistent with research by (Hwang et al, 2020), who stress the importance of digital literacy in successful technology-enhanced learning environments. To improve digital literacy, institutions should prioritize training and professional development programs.

Effective training programs should be designed to build both foundational and advanced digital skills. For instance, incorporating hands-on workshops and practical exercises into training can help educators and students develop the necessary



competencies to navigate digital tools. The success of such programs can be observed in initiatives like the European Union's eTwinning project, which provides training and resources to educators across Europe to enhance their digital skills. Tailoring training programs to the specific needs of educators and students, and providing ongoing support, will enhance their ability to utilize blended learning effectively.

Institutional policies also play a pivotal role in shaping the adoption of blended learning. The absence of supportive policies can hinder efforts to integrate blended learning into the curriculum. The study highlights the need for clear guidelines and policies at Kwara State College of Education Oro, aligning with (Kaisara & Bivalya, 2021) who argue that institutional policies should foster a supportive environment for blended learning by addressing issues such as resource allocation, faculty training, and student support services.

Developing and implementing supportive policies involves creating a strategic framework that outlines the goals and objectives of blended learning initiatives. This framework should address key areas such as resource allocation, faculty development, and student support. Successful examples of supportive policy frameworks can be found in the U.S. Department of Education's Office of Educational Technology, which provides guidance and resources for schools to develop and implement effective technology policies (U.S. Department of Education, 2022). Establishing clear guidelines and policies will create a conducive environment for the successful adoption of blended learning.

Thus, the integration of blended learning at Kwara State College of Education Oro is influenced by several challenges, including inadequate infrastructure, high technology costs, resistance to change, low digital literacy, and insufficient institutional policies. Addressing these barriers requires a comprehensive approach that includes investing in infrastructure, developing funding initiatives, implementing change management strategies, enhancing digital literacy through targeted training, and creating supportive institutional policies. By tackling these barriers effectively, institutions can create an environment that fosters the successful implementation of blended learning and ultimately enhances educational outcomes.

V. Conclusion and Recommendations

In conclusion, the study identifies significant barriers to blended learning adoption at Kwara State College of Education Oro, including inadequate

infrastructure, unreliable internet, insufficient digital devices, low digital literacy, and resistance to change. To address these issues, the following steps are recommended:

- Improve internet connectivity and collaborate with providers to ensure reliable access for all users.
- Partner with technology companies for discounted devices and establish a loan programme for low-income students.
- Implement continuous training programs to boost digital skills among educators and students.
- Form a dedicated team to support blended learning implementation, offer technical assistance, and develop training resources.
- Formulate clear guidelines for technology use and support to address resistance and ensure successful integration.
- Establish a framework for regular feedback and continuous improvement.

These actions will address the barriers and improve teacher training quality, better preparing future educators for modern classrooms.

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