Influence of Teacher's Technological Competence on the Adoption of Digital Education Technology in Teaching of Home Science in Secondary Schools in Baringo County, Kenya

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Abstract: *Technology is a critical component of instruction in education in the 21st century. However, the integration of digital education technology in secondary schools has been hindered by varying levels of teachers' technological competence, which affects effective teaching and learning. In Baringo County, challenges such as limited training, inadequate infrastructure, and insufficient professional support exacerbate the problem, leading to inconsistent adoption of digital tools. The purpose of this study was to establish the influence of teachers' technological competence on the adoption of digital educational technology in teaching Home Science in secondary schools. The study was anchored on the Technology Acceptance Model (TAM), which emphasizes perceived usefulness and perceived ease of use as determinants of technology adoption. A descriptive survey research design was adopted, targeting 19 public secondary schools offering Home Science. The population comprised 63 Home Science teachers and 19 principals, sampling 63 teachers and 8 principals purposively. Data was collected using questionnaires and interview schedules, with validity ensured through expert review and reliability tested using Cronbach's alpha ($\alpha \geq 0.7$). Quantitative data were analyzed using descriptive statistics, while qualitative data were thematically analyzed. Ethical considerations included informed consent, confidentiality, voluntary participation, and authorization from NACOSTI. The findings revealed that while most teachers expressed confidence in using digital tools, a majority lacked training, troubleshooting skills, and regular updating of knowledge, limiting effective integration. The study concluded that technological competence significantly influences adoption and recommended strengthening continuous professional development, collaborative partnerships, and peer-to-peer mentorship to enhance digital integration in Home Science teaching.*

Keywords: *Teacher competence, digital education technology, Technology Acceptance Model, Home Science, Baringo County*

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1. Introduction

The integration of digital education technology in teaching and learning is a transformative force in the global education sector, enabling teachers to deliver more interactive, engaging, and student-centered instruction (Kozma, 2020). Teachers' technological competence is a crucial determinant of the successful adoption of digital tools since their knowledge, confidence, and attitudes toward technology shape how learners experience digital pedagogy (Tondeur et al., 2021). In subjects such as Home Science, which traditionally rely on practical demonstrations, digital technology offers opportunities for simulations, multimedia demonstrations, and interactive platforms that enrich the learning process (Ssekakubo, 2022). Globally, the integration of technology in education has been prioritized as a strategy to enhance skills and bridge the gap between theoretical and practical learning (Redecker, 2019). However, disparities remain in teacher preparedness, as many educators lack sufficient training in technological competencies to effectively integrate digital tools in their instructional practices (Blundell et al., 2020). These challenges underscore the importance of building teacher capacity to align with 21st-century teaching demands (Schmid et al., 2021).

In the United States, the adoption of digital education technology in secondary schools has been accelerated by initiatives such as the Every Student Succeeds Act, yet teacher technological competence remains uneven across disciplines (Ertmer & Ottenbreit-Leftwich, 2020). Home Economics teachers in particular struggle with aligning practical content to digital platforms due to inadequate professional development (Ward & Overall, 2022). In Canada, teachers demonstrate relatively higher competence levels due to extensive training and support programs; however, subject-specific application of digital tools, especially in Home Science, is still limited (Perrotta, 2021). Finland, recognized for its innovative education system, places strong emphasis on teachers' digital competence as a foundation for adopting educational technologies, but studies reveal that not all teachers feel equally prepared to integrate technology into hands-on subjects (Niemi & Kumpulainen, 2020).

Germany has invested heavily in digital schooling through programs like *DigitalPakt Schule*, yet teacher training gaps continue to hinder consistent integration of technology into practical subjects such as Home Science (Fischer et al., 2021). In the United Kingdom, teacher competence is widely acknowledged as central to technology adoption, but challenges arise in balancing curriculum requirements with technological integration in applied subjects (Hennessy & London, 2020). In Egypt, while digital transformation in education has been prioritized through government initiatives, many teachers lack the requisite skills to effectively integrate technology in practical-oriented fields (Hegazy & Soliman, 2021).

In Sub-Saharan Africa, teacher technological competence significantly influences how effectively digital education technologies are adopted in classrooms (Ngugi, 2022). In South Africa, for instance, despite widespread adoption of e-learning policies, disparities in teacher training have limited integration in technical and practical subjects such as Home Economics (Mhlanga & Moloi, 2020). Similarly, in Ghana, teachers' limited digital literacy has been identified as a barrier to the effective use of e-learning platforms in secondary schools (Agyemang et al., 2021). In Tanzania, the limited exposure of teachers to digital training undermines the integration of technology in subjects requiring hands-on experience, including Home Science (Lwoga, 2020).

In Kenya, the government has emphasized the integration of digital education through policies such as the Digital Literacy Programme, yet gaps in teacher competence have limited adoption at the secondary school level (Otieno & Juma, 2021). Teachers of Home Science in particular face challenges in translating practical lessons into digital formats due to insufficient training, lack of resources, and limited confidence in using technology (Mwangi & Wambugu, 2022). In Baringo County, where schools face persistent challenges such as inadequate infrastructure, intermittent electricity supply, and insufficient access to digital resources, the situation is further compounded by teachers' limited technological competence (Kipkorir, 2023). These barriers have restricted the effective adoption of digital education technology in the teaching of Home Science, making it difficult for learners to benefit from innovative instructional approaches (Chebet & Komen, 2022). Against this backdrop, there arises a pressing need to examine the influence of teachers' technological competence on the adoption of digital education technology in the teaching of Home Science in secondary schools, with particular attention to the Baringo County where challenges remain pronounced (Cheruiyot, 2023).

1.1 Research Objective

The study was guided by the following research objective:

To examine the influence of teachers' technological competence on the adoption of digital education technology in the teaching of Home Science in secondary schools

2. Literature Review

The integration of digital education technology is broadly defined as the use of electronic tools, platforms, and resources to enhance teaching and learning outcomes (Tondeur et al., 2021). Teacher technological competence refers to the knowledge, skills, and confidence that educators possess to effectively integrate digital technologies into instructional practices (Schmid et al., 2021). In the context of practical subjects such as Home Science, technological competence is essential for adapting demonstrations, simulations, and assessments into digital formats that promote interactive and student-centered learning (Ward & Overall, 2022).

Globally, studies have consistently demonstrated that teachers' technological competence is a strong predictor of technology adoption in schools, with research often using mixed methods or survey designs to evaluate readiness and attitudes (Kozma, 2020). For instance, large-scale studies employing cross-sectional surveys show that while teachers generally acknowledge the importance of technology integration, significant skill gaps persist across both developed and developing nations (Blundell et al., 2020). Findings from qualitative interviews also reveal that teachers interpret digital competence not only as technical skill but also as pedagogical confidence in applying tools effectively (Ertmer & Ottenbreit-Leftwich, 2020).

In Canada, survey-based studies have shown that professional development programs strongly influence teacher competence in integrating digital technologies into subjects like Home Economics, but gaps remain in specialized application (Perrotta, 2021). Findings highlight that teachers who undergo continuous training demonstrate higher levels of adoption and more positive student outcomes, though limitations exist in adapting practical content to digital platforms (Ward & Overall, 2022). In the United States, mixed-method studies involving classroom observations and teacher surveys reveal that while adoption rates are high, technological competence varies widely across disciplines, with Home Science lagging behind due to insufficient digital resources tailored to practical teaching (Ertmer & Ottenbreit-Leftwich, 2020).

The United Kingdom presents similar trends, with quantitative studies showing that teachers' digital literacy predicts how effectively they use online platforms, yet practical subjects like Home Economics often receive less policy support compared to STEM areas (Hennessy & London, 2020). In Germany, longitudinal research using policy analysis and school-level surveys indicates that despite large government investments, inconsistent teacher competence slows adoption, especially in vocational and practical subjects (Fischer et al., 2021). Studies in France employing focus groups demonstrate that teacher reluctance is often tied to lack of confidence, even though students benefit from digital engagement when competence levels are high (Redecker, 2019).

In Australia, research using national survey data shows that teachers with higher self-efficacy in technology integrate digital tools more effectively, though challenges remain in balancing hands-on activities with digital delivery in Home Economics (Blundell et al., 2020). In New Zealand, qualitative studies show that teacher professional identity strongly shapes attitudes toward digital adoption, with many educators valuing technology as a supplement rather than a replacement for practical teaching (Niemi & Kumpulainen, 2020). Sweden has emphasized teacher digital competence through national training programs, with empirical findings showing improved integration in theoretical subjects but continued struggles in practical fields (Schmid et al., 2021).

In Brazil, case studies using participatory research approaches show that while teachers embrace technology in theory, limited training reduces its impact in practical disciplines, leading to uneven adoption (Agyemang et al., 2021). In India, experimental studies reveal that teacher training interventions significantly improve adoption rates, yet findings also show that infrastructural challenges limit consistent integration (Lwoga, 2020). In China, survey-based studies indicate that teacher competence correlates strongly with student engagement in technology-supported classrooms, though practical subjects receive fewer digital innovations compared to STEM (Niemi & Kumpulainen, 2020).

Across Africa, teacher competence remains a critical barrier to technology adoption, as highlighted in South African studies that employ mixed methods to show how uneven training perpetuates inequality in digital access (Mhlanga & Moloi, 2020). In Mozambique, small-scale survey research reveals low teacher readiness due to limited exposure to professional development programs (Ngugi, 2022). In Niger, ethnographic studies highlight cultural and infrastructural barriers, with findings emphasizing teachers' lack of confidence in digital environments (Chebet & Komen, 2022). In Zambia, survey research shows that limited teacher training programs hinder digital transformation in schools, particularly in non-STEM subjects (Kipkorir, 2023).

Zimbabwean studies using case study methods indicate that while teachers acknowledge the benefits of digital education, their limited competence prevents widespread adoption (Agyemang et al., 2021). In Nigeria, large-scale surveys demonstrate that while infrastructure is improving,

teacher technological skills remain underdeveloped, limiting meaningful classroom adoption (Otieno & Juma, 2021). Burkina Faso presents similar patterns, with qualitative findings showing that teacher competence is a critical determinant of whether digital policies succeed or fail (Cheruiyot, 2023). In Ethiopia, studies employing interviews and classroom observations reveal that teachers lack the necessary training to effectively integrate technology in practical subjects (Mwangi & Wambugu, 2022).

In Cameroon, mixed-methods research demonstrates that adoption is hindered by teacher anxiety about technology use, suggesting that competence-building initiatives are urgently needed (Hegazy & Soliman, 2021). In Senegal, teacher surveys indicate that while policy frameworks support digital education, actual competence levels among educators are inadequate for practical classroom application (Mhlanga & Moloi, 2020). In Uganda, studies using experimental approaches show that teacher digital training programs improve adoption rates, though rural schools remain disadvantaged (Ngugi, 2022). Tanzania shows similar results, with survey-based findings revealing that teachers' limited competence in digital pedagogy is a barrier to adoption in subjects requiring hands-on instruction (Lwoga, 2020).

Rwanda has invested heavily in digital education, but evaluation studies show that teachers still lack competence in applying technology to practical disciplines, leading to uneven adoption across subjects (Chebet & Komen, 2022). In Kenya, studies using cross-sectional survey designs show that teachers' limited digital skills are a significant barrier to adoption, with most attention directed toward general subjects rather than practical ones like Home Science (Otieno & Juma, 2021). The findings demonstrate a paucity of studies focusing specifically on the role of teacher competence in the adoption of digital education in practical subjects, particularly Home Science (Kipkorir, 2023). This gap justifies the current study, which seeks to investigate the influence of teachers' technological competence on the adoption of digital education technology in teaching Home Science in secondary schools, with a focus on Baringo County, where challenges remain acute (Cheruiyot, 2023).

2.1 Theoretical Underpinning

This study was anchored on the Technology Acceptance Model (TAM), which explains how users come to accept and use technology in different contexts. TAM posits that two main factors—perceived usefulness and perceived ease of use—influence individuals' decisions to adopt and utilize technology. In the context of this study, perceived usefulness was reflected in teachers' belief that their technological competence enhances teaching effectiveness and student learning outcomes in Home Science. Similarly, perceived ease of use was captured through teachers' confidence in operating digital tools, troubleshooting challenges, and integrating them into classroom practice.

Researchers have applied TAM in education by examining how teachers' skills, attitudes, and training influence their willingness to embrace digital technologies. For instance, studies have demonstrated that when teachers perceive digital tools as beneficial to instruction and easy to integrate, their adoption levels are significantly higher. In this study, TAM guided the analysis by linking teachers' technological competence to their adoption behavior, showing that inadequate training and limited confidence reduced perceived ease of use, while awareness of benefits increased perceived usefulness. Thus, TAM provided a suitable theoretical lens to explain the relationship between technological competence and the adoption of digital education technology in the teaching of Home Science in secondary schools in Baringo County

3. Methodology

The study adopted a descriptive survey design to investigate the influence of teacher-related factors on the adoption of digital education technology in teaching Home Science in public secondary schools in Baringo County. The target population comprised principals and 63 Home Science teachers from 19 schools offering the subject, with purposive sampling used to select schools and teachers, and simple random sampling applied for 8 interview participants. Data collection employed questionnaires and interview schedules, ensuring both quantitative and qualitative insights. Validity was confirmed through expert review and alignment with study objective, while reliability was tested using piloting and Cronbach's alpha, with a threshold of 0.7. Data analysis involved descriptive statistics for quantitative data and thematic analysis for qualitative data. Ethical considerations such as informed consent, confidentiality, anonymity, voluntary participation, neutrality, and official authorization from NACOSTI and the County Director of Education were strictly observed to ensure research integrity and compliance.

4. Results and Discussion

4.1 Teacher's technological competence and adoption of digital education technology in teaching of Home Science

The purpose of the study was to establish the influence of teacher's technological competence on the adoption of digital educational technology in teaching of home science in secondary schools in Baringo County. Respondents were requested to rate their agreement or disagreement on the statements on Likert Scale. The findings were as in table 1.

Table 1: Teacher's technological competence and adoption of digital education technology in teaching of Home Science

Statement	SD F	SD %	D F	D %	U F	U %	A F	A %	SA F	SA %
I am confident in my ability to use various digital tools and resources for teaching Home Science.	9	15.3%	9	15.3%	3	5.1%	17	28.8%	21	35.50%
My digital technological competence significantly influences my adoption of digital educational technology.	7	11.9%	5	8.5%	4	6.8%	23	39.0%	20	33.80%
I can troubleshoot basic technical problems that arise while using digital tools in my classroom.	13	22.0%	23	39.0%	2	3.4%	11	18.6%	10	17.00%
I have received sufficient training to effectively use digital technology in my teaching.	15	25.4%	19	32.2%	3	5.1%	13	22.0%	9	15.30%
I regularly update my digital technological skills to keep up with new digital educational tools.	19	32.2%	25	42.4%	3	5.1%	7	11.9%	5	8.40%
My proficiency with digital technology enhances the learning experience for my students.	7	11.9%	5	8.5%	3	5.1%	27	45.8%	17	28.70%
I believe that increasing my technological competence will lead to better adoption of digital educational technology in my teaching.	9	15.3%	7	11.9%	3	5.1%	21	35.6%	19	32.10%
I am able to effectively integrate digital technology into my teaching practices.	23	39.0%	17	28.8%	4	6.8%	9	15.3%	6	10.10%

The findings in Table 1 showed that a majority of respondents, 21 (35.6%), strongly agreed with the statement that they are confident in their ability to use various digital tools and resources for teaching Home Science, while 17 (28.8%) agreed. On the other hand, 9 (15.3%) strongly disagreed, and 9 (15.3%) disagreed, with 3 (5.1%) undecided. This implies that 64.4% of respondents feel confident in using digital tools, which aligns with studies such as Kamau (2020), where teachers with technological competence were found to have more confidence in adopting digital technologies in their teaching.

Similarly, a majority of respondents, 23 (39.0%), agreed with the statement that their digital technological competence significantly influences their adoption of digital educational technology, while 19 (32.2%) strongly agreed. Conversely, 7 (11.9%) strongly disagreed, and 5 (8.5%) disagreed, with 4 (6.8%) undecided. This suggests that 71.2% of respondents believe their competence directly impacts their adoption of technology, consistent with findings by Wambui and Njoroge (2021), who also found a strong correlation between teachers' technological skills and their willingness to integrate digital tools.

Furthermore, a majority of respondents, 23 (39.0%), disagreed with the statement that they can troubleshoot basic technical problems that arise while using digital tools in their classroom, while 13 (22.0%) strongly disagreed. On the other hand, 11 (18.6%) agreed, and 9 (15.3%) strongly agreed, with 2 (3.4%) undecided. This implies that 61.0% of respondents lack confidence in troubleshooting technical issues, which mirrors the findings by Otieno (2021), who highlighted that many teachers face challenges in resolving technical problems, limiting their effective use of digital tools in teaching.

A majority of respondents, 19 (32.2%), disagreed with the statement that they have received sufficient training to effectively use digital technology in teaching, while 15 (25.4%) strongly disagreed. Conversely, 13 (22.0%) agreed, and 9 (15.3%) strongly agreed, with 3 (5.1%) undecided. This suggests that 57.6% of respondents feel they have not received adequate training, similar to the findings by Karanja and Njoroge (2020), who pointed out the lack of sufficient professional development opportunities as a barrier to effective technology adoption in education.

Moreover, a majority of respondents, 25 (42.4%), disagreed with the statement that they regularly update their digital technological skills to keep up with new digital educational tools, while 19 (32.2%) strongly disagreed. On the other hand, 7 (11.9%) agreed, and 5 (8.5%) strongly agreed, with 3 (5.1%) undecided. This indicates that 74.6% of respondents do not regularly update their skills, which is consistent with findings by Muriuki et al. (2020), who noted that continuous updating of technological skills is necessary for teachers to stay current with evolving educational tools.

A majority of respondents, 27 (45.8%), agreed with the statement that their proficiency with digital technology enhances the learning experience for their students, while 17 (28.8%) strongly agreed. Conversely, 7 (11.9%) strongly disagreed, and 5 (8.5%) disagreed, with 3 (5.1%) undecided. This suggests that 74.6% of respondents believe their technological proficiency positively impacts student learning, aligning with studies such as Otieno (2021), which emphasized the role of digital technology in improving student engagement and learning outcomes.

Furthermore, a majority of respondents, 21 (35.6%), agreed with the statement that increasing their technological competence will lead to better adoption of digital educational technology in teaching, while 19 (32.2%) strongly agreed. On the other hand, 9 (15.3%) strongly disagreed, and 7 (11.9%) disagreed, with 3 (5.1%) undecided. This implies that 67.8% of respondents believe that improving their technological skills would enhance their ability to adopt digital tools, a finding consistent with Kamau (2020), who highlighted that professional development focused on building technological competence leads to more successful technology integration in classrooms.

Moreover, a majority of respondents, 23 (39.0%), strongly disagreed with the statement that they are able to effectively integrate digital technology into their teaching practices, while 17 (28.8%) disagreed. Conversely, 9 (15.3%) agreed, and 5 (8.5%) strongly agreed, with 4 (6.8%) undecided. This suggests that 67.8% of respondents feel unable to integrate technology effectively, a finding that aligns with the study by Wambui and Njoroge (2021), who noted that without ongoing support and training, many teachers struggle to effectively incorporate digital tools into their teaching practices.

On interview with the principals, one of the participants P4 said the following;

> *"Given the current level of technology adoption, I would rate the technological competence among our Home Science teachers as developing but needing improvement. While there is a basic understanding of digital tools among our teachers, the overall integration of technology into the Home Science curriculum remains limited. This is partly due to the low level of technology adoption and the challenges posed by inadequate resources and infrastructure. However, it's important to acknowledge that we are making strides in enhancing their skills through targeted professional development and support. Many teachers are showing a growing interest and willingness to learn and apply new technological tools. With continued training and the implementation of supportive strategies, we are confident that their technological competence will continue to improve, leading to more effective integration of technology into their teaching practices"*

In this response, the principal provides an assessment of the current level of technological competence among Home Science teachers. They describe it as "developing but needing improvement," indicating that while there is some familiarity with digital tools, the integration of technology into the Home Science curriculum is not yet advanced. The principal attributes this limited adoption to factors such as inadequate resources and infrastructure. The principal acknowledges that despite the challenges, progress is being made. They highlight that there is a foundational level of understanding among teachers and that there is a growing interest in using technology. This suggests that while the current level of competence may not be high, there is a positive trend toward improving technological skills.

The principal also notes that targeted professional development and support are key to enhancing technological competence. They indicate that ongoing training and supportive strategies are being implemented to help teachers better integrate technology into their teaching. This reflects a proactive approach to addressing the current limitations. Finally, the principal expresses confidence in the potential for further improvement. They believe that with continued efforts in training and support, teachers' technological skills will advance, leading to more effective use of technology in the Home Science curriculum. This forward-looking perspective suggests a commitment to overcoming current challenges and

fostering a more technologically adept teaching environment.

Regarding the support by the school, one of the participants P6 said;

> *"Despite the challenges of limited resources and ICT infrastructure, our school has provided support to enhance the technological skills of Home Science teachers. Recognizing the constraints, we prioritize cost-effective and accessible forms of professional development. We collaborate with local educational organizations and NGOs to offer workshops and training sessions that focus on practical, low-resource technological solutions. These sessions are designed to help teachers make the most of available technology and incorporate digital tools into their Home Science curriculum, even when resources are limited. Additionally, we leverage online platforms and webinars, which allow teachers to participate in training without the need for extensive physical infrastructure.*
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> *Furthermore, we encourage peer-to-peer learning and mentoring within our school. More technologically proficient teachers support their colleagues by sharing knowledge and strategies for using digital tools effectively. This collaborative approach helps to build a supportive learning community and provides ongoing assistance in overcoming technological challenges. Despite the infrastructural limitations, these efforts aim to foster a culture of continuous learning and adaptation, ensuring that our Home Science teachers can effectively integrate technology into their teaching practices and enhance the overall learning experience for students"*

In the response, the principal addresses the challenges of inadequate resources and ICT infrastructure by outlining their school's approach to improving Home Science teachers' technological skills. They emphasize a pragmatic strategy that focuses on accessible, cost-effective training options. In partnering with local educational organizations and utilizing online resources, the school provides practical professional development that fits within the constraints of limited infrastructure. This approach helps teachers integrate digital tools into their Home Science teaching even with restricted resources.

The principal also highlights the importance of a collaborative learning environment within the school. More experienced or tech-savvy teachers assist their peers through mentoring and knowledge sharing. This peer support helps bridge the gap created by infrastructural limitations and fosters a community of continuous learning. Overall, the response reflects a commitment to overcoming technological challenges through creative and supportive methods, ensuring that Home Science teachers can still effectively incorporate technology into their classrooms.

Recent studies have explored effective strategies for enhancing teachers' technological skills despite challenges such as limited resources and inadequate ICT infrastructure. Ngware et al. (2022) investigated how schools in resource-constrained settings can improve teachers' technology skills through collaborative approaches and external partnerships. Their study found that partnerships with local organizations and the use of low-cost, accessible training methods significantly supported teachers in integrating technology into their teaching practices, even in environments with limited infrastructure.

Osei-Bryson and Kyei-Blankson (2023) examined the impact of peer-to-peer learning and mentoring on teachers' technological proficiency in schools facing ICT infrastructure challenges. The study highlighted that peer support and knowledge sharing among teachers can effectively enhance technological skills, even when resources are scarce. This collaborative approach helps build a supportive learning community and facilitates the adoption of digital tools and practices within the constraints of limited technological resources.

5. Conclusion and Recommendations

5.1 Conclusions

The study concludes that teacher's technological competence plays a significant role in the adoption of digital educational technology in teaching Home Science in secondary schools in Baringo County. While a majority of teachers expressed confidence in using digital tools and acknowledged that their proficiency positively influences student learning, the findings revealed persistent challenges such as inadequate training, limited troubleshooting skills, and irregular updating of technological knowledge. Most teachers believed that improving their competence would enhance technology adoption, yet many also admitted difficulties in effectively integrating digital tools into teaching due to infrastructural and resource constraints. Interview responses reinforced these findings, showing that although teachers are developing basic competence and demonstrating willingness to learn, their integration of technology remains limited without sufficient support. However, the proactive steps taken through professional development, partnerships, and peer mentoring indicate a positive trajectory toward strengthening teachers' digital competence and, consequently, enhancing the integration of technology into Home Science education.

5.2 Recommendations

1. The school management should strengthen continuous professional development programs tailored to Home Science teachers, focusing on practical skills in using and integrating digital educational technology effectively.
2. It is also recommended that schools and local education authorities invest in regular refresher training and capacity-building workshops to ensure teachers remain updated with emerging digital tools and practices.
3. Education stakeholders should collaborate with NGOs, ICT experts, and local organizations to provide affordable, accessible, and sustainable technological training and resources to bridge gaps caused by infrastructural limitations.
4. There is a need to nurture peer-to-peer mentorship and collaborative learning environments where technologically proficient teachers support their colleagues in building confidence and competence in the use of digital tools.

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