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RESEARCH ARTICLE

Barriers to E-Learning Instructional Media Adoption among Teachers at Nyang'hwale District Secondary Schools

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ABSTRACT

This article discusses the barriers to e-learning instructional media adoption among teachers at Nyang'hwale District secondary schools. The study was guided by diffusion of innovation theory. The researcher collected data by using questionnaire, interview and observation. It utilized stratified sampling, simple random sampling and purposeful sampling to obtain 53 teachers, 4 ward education officers, 4 heads of schools and 1 DEO school. The study employed the mixed research approach and explanatory sequential research design. The researcher coded and analysed data by using descriptive statistics with the help of SPSS 16 version. The study was guided by three objectives namely; to identify resource limitations needed for e-learning as instructional media among teachers, to analyse existing training that enable teachers in adopting e-learning instructional media, and to explore attitudinal barriers among teachers towards e-learning instructional media in Nyang'hwale district. The findings revealed that teachers are rarely using e-learning instructional media despite having electrical power, tablets and also there are some few devices, inadequate skills, poor infrastructures and internet connection. Also teachers lack training that enable them to adopt e-learning instruction media. The study recommended that the government needs to allocate adequate electronic devices in secondary schools and to provide training to all teachers on the adoption of e-learning instructional media.

Keywords: Barriers; E-learning; instructional media; students' learning

INTRODUCTION

E-learning instructional media in this 21st century is very important in education for shaping scholars who align with the global market, in order to make the world a global village, as a key principle of globalization. This allows students from both rural and urban areas to share learning experiences. This is because e-learning instruction media includes many forms of electronically supported learning and teaching to help to provide quality education to students (URT, 2016). The adoption of e-learning instructional media in teaching significantly contributes to the advancement of the economic educational systems of countries (Naresh et al., 2015). According Fayomi et al (2015), the introduction of multimedia technologies and the internet in learning help in improving accessibility and quality of delivery and learning among the students and teachers in private secondary school and tertiary institution in Nigeria. Ngeze (2017) argued that e-learning instructional medium has proven to be a very effective approach for improving the performance of secondary school students. URT (2024), Tanzania 2024 ICT policy in education is part of a broader educational reform aimed at integrating information and communication

technology (ICT) into the curriculum to enhance learning outcome and equip students with 21st century learning skills.

The introduction of e-learning in education has an enormous history. E-learning was introduced in the USA as early as the 1960s, with initiatives such as slide projectors and television-based classes. The main force behind the adoption of e-learning in the USA is technological advancement. This introduction aimed to enhance accessibility, flexibility, effectiveness, and inclusivity in education (Nguyen et al., 2022). In developed countries like USA, China and Singapore, e-learning as instruction medium existed in 1990s (Nguyen et al, 2022), (Wang, 2018) & (Kong, 2014). Successful adoption requires infrastructure, motivated teachers, and guidelines from technology designers.

Like many other countries across the world, Tanzania also is a country which insist teachers to use technology to provide quality education to its citizens. In Tanzania, e-learning has historical roots. Hare (2007), cited by Kafyulilo (2015), contended that in the 1960s and early 1970s, primary and secondary schools were provided radios to enable students to listen to education programs. This is also has proven since 2003 when the country established ICT policy, the policy also reviewed in 2016 to ensure that the implementation of technology and communication in Tanzania is implemented effectively. The policy has many effects like the establishment of the ministry of science, information, communication and technology and accelerated the country's digital transformation. The policy influenced the implementation of ICT projects such as Tanzania Railway Corporation (TRC) and Tanzania Electric Supply Company Limited (TANESCO) to further expand of broadband connectivity in the country. Also, the national ICT policy have reviewed 2024 with vision of an inclusive digitally empowered Tanzania through knowledge-based socio-economic growth, innovation, and community connectivity through ICT and mission of promoting digital innovation transformation and building a digitally-enabled knowledge-based economy for national development (URT, 2024). Additionally, to ensure effective adoption of e-learning in Tanzania, the government distribution of 293,400 tablets to teachers and school officers, aiming to enhance teaching and learning through information communication technology.

But in Nyang'hwale District, traditional teaching methods still dominate, with teachers relying on chalkboard and textbooks to deliver materials in the classroom. Teachers often use drawing to depict authentic and realistic scenarios for students. This traditional teaching approach contributes to students' poor academic performance in form two and form four national examinations because students often memorize information without comprehending it fully and also students lack enduring understanding 21st skills and lifelong learning competencies. This study was guided by objectives such as;

i. To identify resource limitations that hinder secondary school' teachers in from adopting e-learning instructional media effectively.
ii. To assess teacher's skills in adoption of e-learning instructional media in secondary schools.
iii. To explore attitudinal barriers among educators towards e-learning instructional media.

This study is going to contribute to the effective adoption of E-learning in public secondary schools in the Nyang'hwale District, Tanzania. It seeks to raise teachers' awareness about E-learning, reduce dependency on traditional teaching methods, and encourage the use of electronic devices. Additionally, it informs policymakers about the opportunities, challenges, and significance of E-learning, thus facilitating better decision-making and resource allocation. Moreover, it provides valuable insights for educational planners to enhance teaching and learning through E-learning facilities. Furthermore, it assists school administrators in supervising and coordinating teachers to ensure the sustainable integration of E-learning

LITERATURE REVIEW

Theoretical Review

This study was guided by the diffusion of innovation theory (DOI) proposed by Everett Rogers in 1962 (Rogers, 2003). This theory explains how new ideas and technologies spread within organizations and businesses. According to Rogers (2003), diffusion of innovation theory describes the process by which innovation and creativity are communicated among participants in a social system. Also, Hartmann (2019) identified that in diffusion of innovation theory there are four main elements influencing the spread of new ideas are the innovation itself, communication channels, social systems, and time. The theory explains the pattern and speed at which new ideas, practices, or

products disseminate to people, considering factors like innovators, early adopters, early majority, late majority, and laggards. Additionally, Mkude et al. (2023) stated that diffusion of innovation theory maintains teachers to be aware about innovation of new technology. The strength of the Diffusion of Innovation (DOI) theory in education lies in its ability to systematically explain how new ideas, practices, or technologies are adopted and spaw3read within educational settings. By identifying key factors such as innovation characteristics, communication channels, time, and social system, DOI theory helps educators and policymakers understand the dynamics of adoption and the critical role of early adopters in influencing others (Rogers (2003).

Empirical Literature Review

Resource limitations needed for e-learning as instructional media among teachers

Das (2020) studied the challenges of using ICT for inclusive education in India and reported that in northeastern India, lack of technology, internet access and qualified trainers are the greatest challenges in providing ICT-based educational services to the masses. One primary challenge in the use of ICT in education is the lack of knowledge and skills among teachers. The challenges mentioned above hinder the adaptation of e-learning as an instruction media in northern India, but it is better to identify available opportunities that can help teachers adapt to learning. Additionally, Tapera and Chamunorwa (2019) identified various obstacles related to the use of information and communication technology (ICT) in teaching chemistry in Zimbabwe. These obstacles predominantly involved external factors such as inadequate skills, negative attitudes, reluctance to adapt to new methods, and personal convictions among instructors. The study's focus was specifically on chemistry education, yet it underscores the broader importance of incorporating e-learning as a teaching tool across all subjects to facilitate lifelong learning for students.

Moreover, Mwakyusa (2016) researched the barriers to implementing e-learning in higher education institutions in Mbeya, Tanzania, the study used 18 empirical review pinpointing issues such as insufficient ICT infrastructure, lack of technical and managerial support, limited internet access, high internet costs, outdated technology, and a lack of maintenance culture. Similarly, Mkulu and Mponela (2023) explored the challenges of teaching with digital devices in public secondary schools in Rungwe District, Mbeya, identifying issues such as digital illiteracy, technical issues, internet costs, and poor connectivity. They suggested further investigation into potential opportunities in the region to enable teachers to utilize their limited resources effectively for e-learning adoption as an instructional. Also, Semlambo et al (2022), studied about factors affecting the adoption of e-learning system in public higher learning Institution in Tanzania by using mixed methodology with a sample size of 126. Thematic and descriptive analysis was used to find factors that affecting the adoption of e-learning system in public higher learning institutions in Tanzania include lack of ICT infrastructures, lack of knowledge and unreliable electricity, lack of technical and managerial support, lack of computers, lack of e-learning knowledge, internet speed.

Teacher training in adoption e-learning instructional media

Borko et al (2020) highlighted the importance of mentorship and coaching in professional development for e-learning. The study recommended that support from experienced colleague can significantly enhance teachers' confidence and competence in using technology, resulting in more effective integration of e-learning tools in the classroom. Also, Beetham and Sharpe (2013) emphasized on providing educators with a framework to design learning experiences that effectively incorporate technology. The study recommended about the importance of professional development for teachers particularly in equipping them with skills and knowledge to effectively integrate technology into their teaching practices.

Asha and Asha (2020) argued that there is a significant lack of training for educators in using technology effectively within their teaching practices. Thus, the integration of technology can foster innovative teaching methods that engage students more effectively. It suggested that investment in infrastructure and resources is critical to support the effective use of technology in education. Furthermore, Zawada and Mchombu (2021) revealed that there is a significant need for establishing comprehensive training programs focused on digital literacy for teachers. This would enhance digital skills to teachers and build competence in their teaching practices.

Attitudinal barriers among educators towards e-learning instructional media

Al-Mahrooqi and Tuzunkan (2021) highlighted several negative attitudes among educators, including resistance to change and fear of technology, personal believes about the effectiveness e-learning and lack of

adequate training and support make teachers feel unprepared to integrate e-learning tools effectively during their teaching practices. It recommends that training program should be developed to foster a culture of innovation within institutions so as to improve attitudes toward e-learning practices. This is in line with Baker and Kafai (2020) who argued that teacher's attitudes are influenced by their previous experiences with technology and institutional support. Thus, teachers who receive adequate training and professional development demonstrate more positive attitudes toward using digital learning tools. The results emphasized on the need for teachers to align technology use with pedagogical goals to enhance student learning as it facilitates innovative teaching practices.

Moreover, Moshi (2017) revealed that many teachers recognize the potential benefits of e-learning for enhancing student engagement and learning outcomes. Despite positive recognition several barriers hinder effective adoption of e-learning as instructional media including lack of training, resources constraints and lack of support from school administration. Therefore, the study suggested that teachers should develop their professional skills to keep them with digital skills and promote a supportive environment for e-learning practices. Also, Kihwele and Mtebe (2021) highlighted various challenges faced by teachers that impede the effective implementation of e-learning as instructional media in their teaching process. The study pointed out that a lack of training plays a critical role toward negative attitude on using electronic devices. Thus, many teachers feel inadequately prepared to utilize e-learning technologies effectively, which led to frustration and a further reluctance to adopt toward new technologies.

METHODOLOGY

This study employed a mixed research approach, combining qualitative and quantitative techniques in a single study, whereas quantitative data dominated the results and qualitative data was embedded. The study also employed an explanatory sequential research design. The sample size of this study was calculated using the Yamane formula (1967) to get a sample size of 53 teachers, 4 heads of schools, 4 WEO and 1 DSEO was used. To collect data, the study used both probability and non-probability sampling procedures. Public secondary schools were selected through simple random sampling. Furthermore, teachers were sampled through simple random sampling procedure. In addition, structured interview and questionnaires were used to collect qualitative and quantitative data from respondents. The instruments as sustained by presenting the interview guide and questionnaires to research experts and supervisors. Quantitative data were collected through the Likert scale and open-ended questionnaires while qualitative data were collected through interview. Quantitative data were analysed using SPSS Version 16 through tables and charts while qualitative data were analysed thematically.

FINDINGS AND DISCUSSION

Resource Limitations Needed for Adoption E-Learning as Instructional Media Among Teachers

The first objective aimed to assess the limitations that are likely to be faced by teachers on the uses of electronic device as media of instructions in teaching and learning in public secondary schools. The researcher collected data using the Likert scale, which contained ratings such as 1. Yes, 2. No and 3. I don't know. The results obtained were analyzed using descriptive statistics in which the mean and standard deviation were computed, and the results obtained are presented and summarized in table 4.1 below.

Table 1. Resource limitations needed for adoption e-learning as instructional media.

Resources limitation	N a	Mean	SD
Inadequate devices	51	1.29	0.536
Infrastructures	51	1.75	0.590
Lack of electricity	51	1.79	0.667
Internet issues	51	1.38	0.599

Source: Field data (2024)

Inadequate Devices

Table 4. Indicates that inadequate devices have a [mean = 1.29 and SD =0.536]; the issue of learning devices is perceived as a major challenge, with a mean score of 1.29. A large majority (75.0%) rated this challenge as 3, suggesting that inadequate devices are a significant barrier for most teachers to adopt E-learning instructional media. The standard deviation of 0.536 shows that there is relatively low variability in how this challenge is perceived. This is also stated by the Diffusion of Innovation theory that in adopting new technology, there are early adopters and late adopters. The Diffusion of Innovation theory helps to understand that there are some factors that can cause some people or institutions to be late to adopt new technology.

The researcher observed that inadequate electronic devices hinder the adoption of E-learning instructional media in secondary schools. This is similar to Hamad et al. (2024) who found that most teachers have a positive attitude toward using digital lesson content in teaching in secondary schools; however, they lack enough relevant digital resources that support digital lesson content. The results obtained through interviews on the challenges in the use of E-learning as instructional media on teachers' teaching process in secondary schools during interviews conducted with the interviewees were as follows: Interviewee G commented that:

> "In our school, there is no computer laboratory in which teachers and students would have access to search for materials. This makes most of my students fail even to differentiate between a computer and the television. The school has two computers, one in the academic office and the second at the school head's office. This does not promote technological integration in classroom with real-world needs" (Interviewee G, July 2024).

This implies that most secondary schools are not provided with enough electronic devices such as computers, projectors, and televisions, which are important to modern generations as it prepares students to be creative and innovative rather than waiting for information vomiting during examinations. This was also found by Barru (2020) who found that most schools have low investment in ICT infrastructures due to the high cost of computers, hardware, and software. Similar to Mwakyusa (2016) found that the adoption of E-learning instructional media in Mbeya is hindered by insufficient ICT infrastructures, lack of technical and managerial support, limited access, and high internet costs. Therefore, if we need to have students with electronic knowledge, there is no way we can avoid teaching through the use of electronic devices in our secondary schools. Hence, this reminds the government to provide computers and other electronic devices tools like internet connection to equip learners and teachers with knowledge and skills on the use of technological devices.

E-Learning Infrastructure

E-learning infrastructure has a [mean=1.75 and SD=0.923]; infrastructure is perceived as a slightly more significant resources limitation for teachers to adopt e-learning instruction media in secondary schools, through observation the researcher investigates that all schools visited have infrastructure challenges, this is because wiring in some classes are not available. Also, classroom need to be adapted for technological use such as providing secure storage for devices and ensuring lighting for equipment. Also, a researcher used interview to understand how infrastructures hinder adoption of e-learning instructional media, respondent H said that:

> "Infrastructures hinders adoption of e-learning as instructional media in our school because there is unstable internet access and modern devices to use electronic devises in the classroom. For example, in our school we do not have computer library and hardware that can help us to adopt e-learning instructional media" (Interviewee H, July 2024).

The interviewee highlights that the adoption of e-learning in their school is hindered by inadequate infrastructure, including unstable internet access and a lack of electronic devices. The absence of a computer library and necessary hardware further limits the ability to implement e-learning effectively, suggesting that the school lacks the essential resources for adopting e-learning instructional media on students learning. This also was insisted by Dongo and Mkulu (2021) who recommended that ICT infrastructures such as projectors should be adequately provided, secondary school leaders need to generate more income, and teachers should be provided training to have the skills to use electronic devices in teaching and learning. Also, the study conducted by Mwakyusa (2016) outlined insufficient ICT infrastructure, lack of technical and managerial support, limited internet access, high internet costs, outdated technology, and a lack of maintenance culture as key barrier in adopting e-learning instructional media.

Lack of Electricity

Table 4.7 indicates that lack of electricity has a [mean=1.75 and SD=0.590]; lack of electricity is considered a moderate challenge, with a mean score of 1.75. This indicates that while it is an issue, it is not seen as a major barrier by most teachers. The standard deviation of 0.590 indicates some variability in responses, with a mix of opinions on how critical this issue is.

Through observation a researcher investigated that all school visited have electricity but in some classrooms lack proper wiring creates barriers to fully adopting e-learning instructional media. Without sufficient electrical proper wiring, it's impossible to operate devices reliably

in classrooms. Through interview respondent D narrated that:

> "In our school we have electricity, but only few classrooms are connected. Additionally, there are times when the power goes out. In order to full benefit to electricity we have, it needs to be distributed to every classroom" (Interviewee A, July 2024).

The interviewee points out that while the school has access to electricity, not all classrooms are connected to the power supply. To fully utilize the available electricity for educational purposes, it is necessary to extend the power connections to all classrooms. This highlights a key infrastructure issue that limits the possible for using electrical devices, such as computers or other e-learning tools, in teaching. This aligns with Semlambo et al. (2022) who revealed factors affecting the adoption of E-learning systems in public higher learning institutions in Tanzania, including lack of ICT infrastructures, lack of knowledge, unreliable electricity, lack of technical and managerial support, lack of computers, lack of E-learning knowledge, and internet speed.

Internet

Table 4.7 indicates that internet issues for teachers have a [mean=1.79 and SD=0.667]; internet issues are perceived as a moderate challenge, with a mean score of 1.79. This indicates that internet connectivity problems are a concern but are not seen as the most significant barrier. Regarding internet connection, in Tanzania, many rural areas have poor internet connection. However, in schools, there are some areas where internet connection is high, while in other areas, there is low internet connection. The quantitative findings were supported by the qualitative findings which exposed that teachers and students have an awareness with some electronic devices such as tablets, television, radios and computers. Interviewee G, insisted that:

> "In this school, if you want internet connection, there are some areas where the internet is high, but in this office, there is no internet connection unless you go to the corner of this building" (Interviewee G, July 2024).

This means that the availability of the internet is an opportunity to adopt E-learning because teachers can go where the internet is high to download materials and save them on flash drives or tablets. Teachers have the ability to access internet connection in their areas. Additionally, Mugisha et al. (2021) found that most public schools have internet connection. Similarly, Das (2020) reported that in northeastern India, lack of technology, internet access, and qualified trainers are the greatest challenges in providing ICT-based educational services to the masses. Through observation a researcher investigated that in the area of the field there are some areas where internet connection is good but in other areas, there is low internet connection. It means that teachers understand areas which have internet connection but according to them to find internet by rounding the school is a disturbance. Therefore, teachers need stable internet connection in order to adopt e-learning instruction media.

Teachers' Training in Adoption of E-Learning Instructional Media

In this second objective, the researcher aimed to assess teachers training that enables them to adopt e-learning instructional media on students learning. The researcher collected data by using questionnaire and interview. The researcher used frequency analysis to understand the quality of training given to teachers for the effective adoption of E-learning instructional media, which were in the Likert scale: 1. Excellent, 2. Good, 3. Fair, 4. Poor, and 5. Very poor as indicated in table 4.3

Table 2. Response from teachers about Quality of Training Received.

Training	Frequency	Percent
Excellent	7	13.5
Good	7	13.5
Fair	8	15.4
Poor	14	26.9
Very poor	15	28.8
Total	51	98.1

Source: Field Data (2024).

Table 4.3 shows the responses from 51 teachers regarding the quality of training they received. A significant majority of teachers were dissatisfied with the training, with 26.9% rating it as "Poor" and 28.8% as "Very Poor," making a total of 55.7% in the lower satisfaction categories. Only 13.5% of teachers each rated the training as "Excellent" or "Good," while 15.4% considered it "Fair." This indicates that most teachers felt the training was inadequate and highlights the need for improvements in its quality. This is aligning with Das (2020) studied on challenges of using ICT and found that the lack of technology, internet access, and qualified trainers are the greatest challenges in the

adoption of E-learning instructional media in the classroom. Also, it is similar to Asha (2020) who argued that there is a significant lack of training for educators in using technology effectively within their teaching practices.

Through observation the researcher identified that most of teachers have smart phone and tablets, but they are not well knowledgeable that tablets can be used as instructional media because most of teachers use their tablets to search materials which are related to content and tablets sometimes are used as lesson notes. The result obtained through interview were as follows: Interviewee B said that;

> "In our school, 40 teachers have tablets that were distributed by the government to help teachers provide quality education to students. Apart from tablets, we also have one projector, two laptops, and one desktop. Teachers use tablets to search for materials, to prepare results, and prepare notes. Teachers rarely use tablets as instructional media, but tablets help them prepare materials for teaching. Also, most teachers use tablets as a phone for making calls and chatting" (Interviewee B, July 2024).

The quotation means that tablets are primarily used for administrative tasks and communication rather than as instructional media, indicating a significant underutilization of their potential in enhancing teaching practices. While the tablets support teachers with material preparation and administrative duties, they are not being effectively integrated into classroom instruction. This suggests a need for targeted professional development to help teachers leverage the tablets more effectively for teaching and learning, as well as a reassessment of how other available technology, like projectors and laptops, can be better utilized to support instructional goals. Also, Jacksi et al. (2021 found that E-learning is essential because it affects students' learning, especially in a collaborative E-learning environment.

Regarding teachers' training, in all schools visited by the researcher, there is a teacher who attends seminars on the adoption of E-learning. Some teachers bring feedback about what they have learned, while others do not. Joseph (2021) found that the lack of ICT skills and knowledge, lack of technical support, and lack of training hinder the adoption of E-learning. An interviewee narrated that:

> "The problem is ICT policy implementation; in this digital age, this policy is good, but the implementation of the policy is poor. They provide policy without providing electronic devices in our school, and this means that the policy implementation is not effective because only one teacher attends a seminar about the adoption of E-learning instructional media. After attending the seminar, they provide seminars to other teachers" (Interviewee G, July 2024).

Santos (2021) found that in order to promote the development of a highly efficient digital education ecosystem, the following must be considered: infrastructure, connectivity, and digital equipment, coordination for e-skills, development policies, developing the digital competences and skills needed for digital transformation, quality learning content and secure E-learning platforms. Additionally, Das (2020) investigated that the adoption of E-learning requires teachers' skills, sufficient infrastructure such as computers, projectors, and internet facilities in all educational institutions. This means the availability of sufficient infrastructures such as computers, projectors, and internet facilities are opportunities for the adaptation of E-learning as instructional media. This also found by Tapera and Chamunorwa (2019) that inadequate skills among instructors hinder adoption of e-learning.

Attitudinal Barriers Among Teachers Towards E-Learning Instructional Media

The third objective aimed to assess attitudinal barriers among educators towards adoption of e-learning instructional media in secondary schools. The researcher employed a mixed-method approach to collect data, including questionnaires, interviews, and observations. A Likert scale was used to rate responses, with the following options: 1 (I don't know), 2 (No), and 3 (Yes). The data collected were analysed using descriptive statistics, specifically computing the mean and standard deviation. The results are presented and summarized in Figure 1:

Figure 1. Indicates that 32 teachers selected 'No' to mean that teachers are not reluctant to adopt e-learning instructional media due to some factors such as inadequate devices. This indicates that reluctance among teachers to adopt E-learning is not a prominent issue, with 86.5% of teachers rating it as 2, suggesting it is a major barrier. Many teachers to select 'NO' reflects a high level of consensus among teachers on this challenge. This is contrary to Tapera and Chamunorwa (2019) who identified that teachers have negative attitudes and reluctance to adapt to new

methods.

"Many teachers at our school are reluctant to use e-learning instructional media because there are few devices and they lack sufficient training. Additionally, the topics do not indicate where to use this device, but teachers in our school have a very positive attitude toward e-learning instructional media on students' learning. But they don't have proper training and support to use e-learning instructional media" (Interviewee I, July 2024).

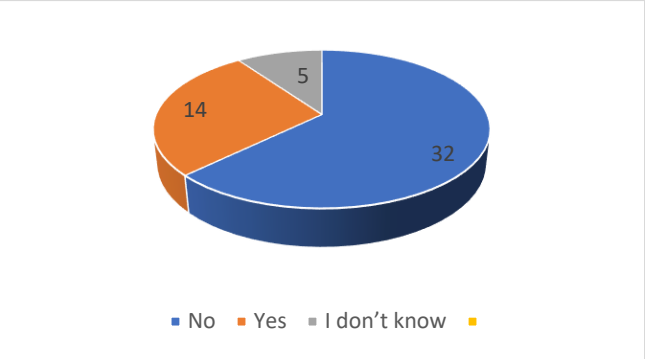

Figure 1. Responses about teacher's reluctance towards adoption of e-learning instructional media.
Source: Field Data (2024).

The interviewee indicates that while teachers at the school have a positive attitude toward the potential of e-learning to enhance student learning, they are doubtful to adopt it due to a lack of resources and training. The limited number of devices and insufficient professional development prevent them from effectively utilizing e-learning tools. Additionally, the curriculum does not provide clear guidance on how to incorporate these devices into lessons, the statement implies the need for better support, training, and resource allocation to enable teachers to adopt e-learning. This aligns with Nyagorme et al. (2017) who revealed that while participants were aware of E-learning and its platforms, they lacked sufficient training, with low computer literacy and inadequate ICT infrastructure in schools hindering E-learning adoption. Also is contrary to Al-Mahrooqi and Tuzunkan (2021) highlighted several negative attitudes among educators, including resistance to change and fear of technology, personal believes about the effectiveness e-learning and lack of adequate training and support make teachers feel unprepared to integrate e-learning tools effectively during their teaching practices. Also, this is emphasized by the diffusion of innovation theory that social system is very important to adopt new technology because people in society can reject or accept new technology. The researcher observed that teachers have positive attitude towards adoption but there are some barriers hinder them in adopting e-learning instructional media.

CONCLUSION AND RECOMMENDATION

The study explored barriers to e-Learning instructional media adoption among teachers, guided by the Diffusion of Innovation theory. It concluded that barriers to e-Learning instructional media adoption among teachers in secondary schools include unstable electricity, lack of skills, poor networking, and inadequate resources. Recommendations focus on improving infrastructure, providing stable networks, and offering in-service training for teachers. The study recommends that all education stakeholders, including the government under the Ministry of Education, Science, and Technology, should ensure effective implementation of the ICT Policy by providing adequate devices to secondary schools and offering training for teachers on using these technologies. Additionally, policymakers should integrate technology more effectively with educational content. Furthermore, in this digital age, teachers need to integrate technology into their teaching.

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