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Influence of ICT-Supported English lessons on English Performance in National Examinations in Public Secondary Schools in Lilongwe West Division, Malawi

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Abstract

This study investigated influence of ict-supported english lessons on english performance in national examinations in public secondary schools in Lilongwe west Division, Malawi. The study was guided by five research question: What is the level of ICT integration in English instruction in public secondary schools in Lilongwe West Division? The study was anchored on Constructivist Learning Theory as advanced by Jean Piaget. The study employed a mixed methods approach, specifically a convergent design, using a cross-sectional survey and phenomenology designs for quantitative and qualitative data collection respectively. The target population included: 47 public secondary schools, 47 head teachers, 94 English teachers, 2,850 form four students, and one Education Division Manager from Lilongwe West Division. The study adopted stratified sampling to sample 10 public secondary schools, simple random sampling to sample 48 form four English teachers, systematic sampling to sample 285 form four students, purposive sampling to include 10 head teachers and one education division manager to ensure fair representation of different categories of respondents. The study employed questionnaires for teachers, interviews for head teachers and education division manager, focus group discussions for students, document analysis guide, and observation guide to gather data. Reliability was confirmed using Cronbach's Alpha coefficient of 0.80. Quantitative data was analyzed using descriptive and inferential statistics while qualitative data was subjected to thematic content analysis. Ethical considerations were observed. The ICT supported English lessons improved the learners' engagement, access to learning resources and English performance in national examinations. The study pointed out that ICT use improves language learning and academic results with adequate infrastructure and teacher competence support. It implies better ICT facilities, providing teachers with digital pedagogy and promoting continuity in the use of technology in teaching English.

Key Words: ICT-supported English lessons; Information and Communication Technology (ICT); English language performance; National examinations; Language acquisition.

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Background to the Study

Learning with the support of Information and Communication Technology (ICT) is the use of digital devices, networks, software and electronic platforms to support the processes of educational management, teaching and learning. In this study, ICT-supported English lessons refer to the deliberate application of technological resources, such as computers, multimedia applications, online platforms, and digital learning materials, to improve English language teaching and learner achievement. English performance is the outcome of learners in assessments of English language, especially national examinations that measure comprehension, writing, grammar and communication competencies. The integration of ICT in secondary education has been recognized as a strategy for improving teaching effectiveness and learner outcomes, but its success depends on the availability of infrastructure, teacher digital competence and meaningful pedagogical application, not just the availability of technology (UNESCO, 2023, 2025).

A growing number of international education stakeholders are promoting ICT as a means to improve access, quality and equity in education. UNESCO states that digital transformation necessitates human-centred strategies where teachers build the confidence and capabilities to integrate technology effectively into classroom practices (UNESCO, 2025). UNICEF also supports digital learning initiatives that increase access to quality learning resources, such as platforms for learners and teachers in underserved communities (UNICEF, 2025). According to the World Bank, technology-assisted instruction can enhance learner engagement and personalize learning if there is sufficient infrastructure, teacher preparation and sustainable policies (World Bank, 2021). But these organizations point out that digital inequalities, weak connectivity, insufficient funding and inadequate teacher preparation limit the effectiveness of ICT initiatives, particularly in developing education systems.

The use of ICT-supported English instruction in the world has become an important educational innovation, as schools look for approaches that improve language acquisition and examination performance. Appropriate teaching strategies that integrate digital resources can help ICT to foster vocabulary learning, communication skills, collaborative learning and learner engagement, research suggests. But international evidence suggests that technology alone does not automatically lead to better academic outcomes, since the outcomes depend on the ability of the teacher to make the link between the ICT tools and curriculum objectives and the needs of learners. As UNESCO (2025) states, digital technologies should be used to improve inclusive and quality learning, and not to increase educational inequalities. Therefore, countries across the globe are moving from a supply of digital devices to the development of teacher competencies, digital pedagogies and sustainable ICT-supported learning environments.

Data from developed countries indicate that even where ICT infrastructure is well developed, effective integration depends on pedagogical practices. Janjić and Coventry (2025) investigated the availability of ICT resources, the frequency of ICT-enhanced English lessons, and teachers' ICT pedagogical competency in primary and secondary schools in the United Kingdom. The researchers found schools have a large number of digital resources, but ICT was often used as a supplementary tool rather than a revolutionary approach to learning English, as

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some teachers did not have subject-specific digital teaching strategies. Similarly, Lim et al. (2025) investigated the use of one-to-one technology in middle schools in South Korea and discovered that ICT improved collaboration, digital thinking, and learner engagement when teachers were adequately trained and actively involved. However, poor pedagogical integration limited the possible effect of ICT on academic outcomes in both studies.

The experiences of the UK and South Korea show that successful English education supported by ICT requires more than just access to digital technologies. In the United Kingdom, Janjić and Coventry (2025) have reported a gap between the availability of ICT resources and teachers' ability to use technology for deeper language learning activities. Lim et al. (2025) in South Korea showed that structured teacher training and curriculum integration improved the effectiveness of technology-supported instruction. Their experience shows that despite better digital infrastructure than many developing countries, teacher competency is still a key determinant of ICT impact. Thus, developing countries like Malawi can learn from these cases by prioritizing teacher professional development, interactive ICT applications and examination-oriented digital teaching strategies rather than focusing on increasing technological access only.

The application of ICT for the support of English teaching has been demonstrated to have the potential to boost learner engagement and language development in African education systems despite the significant challenges of implementation. In Ghana, Awoniyi et al. (2025) examined the integration of ICT into English language education in the senior high schools in the Greater Accra Region. The study focused on teachers' ICT pedagogical competency and the frequency of ICT-supported English lessons. The study found that effective use of ICT improved learner engagement, critical thinking and individualized instruction; however, inadequate infrastructure, unequal access to devices and limited teacher professional development limited meaningful integration. In the same vein, Bikorimana and Murwanashyaka (2023) researched the application of ICT in the teaching of English language in some secondary schools in Rwanda and found that ICT supported vocabulary development, grammar instruction, and the acquisition of language skills. But the use of ICT was often confined to simple applications due to the lack of digital resources and a lack of pedagogical preparation.

More recent evidence from Rwanda also suggests that access to technology alone does not lead to improved English learning outcomes. According to Bikorimana and Murwanashyaka (2023), teachers acknowledged the benefits of ICT in teaching foreign languages, but the successful integration of ICT in the classroom was constrained by the absence of interactive platforms, lack of professional support, and poor lesson planning. Twagilimana et al. (2026) also examined the integration of ICT by teachers in secondary schools in Rwanda and found that teachers had access to basic digital devices but still experienced challenges regarding the availability of advanced technologies, internet connectivity and ICT skills. These findings point to the need for holistic ICT strategies for African countries that combine infrastructure, teacher training, and pedagogically oriented digital practices to improve language learning outcomes.

In Malawi, the integration of ICT in education is guided by the National ICT Policy and the National Education Sector Investment Plan (NESIP), which promote the development of

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digital skills and the integration of ICT across all levels of education. But these policies are unevenly implemented as many secondary schools still lack adequate infrastructure, internet connectivity, reliable electricity and teacher preparation. Kainja and Mkandawire (2022) found that although many teachers had basic ICT literacy skills, few were able to effectively integrate ICT in classroom teaching. UNESCO (2021) also observed that teachers often lacked the necessary pedagogical ICT competencies for subject-oriented applications such as teaching English. These challenges have limited the scope of ICT's contribution to improved examination performance across Malawi's education divisions.

In contrast, divisions with better access to ICT resources have had improved opportunities for digital learning, while rural divisions with less resources continue to face challenges with limited access to ICT. The Ministry of Education and other stakeholders raised concerns that low levels of ICT utilization have contributed to the continued challenges in English performance especially in the national examinations such as the Malawi School Certificate of Education (MANEB, 2023). Some schools that use digital reading platforms and multimedia resources have observed increased learner engagement. ICT is an enabler and not the sole determinant of academic achievement. This suggests a need for localized research into the impact of ICT supported English lessons on examination outcomes in particular educational contexts.

Earlier studies in the Lilongwe West Division of Malawi have focused on the availability of ICT, teacher competency and overall ICT integration in the teaching of English. Rintaningrum and Saka (2021), and Saka (2023) studied the utilization of ICT in English language teaching, and the teachers' ICT pedagogical competency and access to digital resources. Their findings showed that the availability of computers, projectors and some degree of internet access enabled learners' participation and rudimentary English teaching. However, ICT-supported English lessons were inconsistent due to poor infrastructure, shared devices, unreliable electricity supply and limited capacity of teachers. The studies also showed that ICT was often used to present information rather than to support interactive language activities such as digital assessments, collaborative writing, and multimedia-based communication. Thus, while the existing literature provides useful insights on the ICT challenges in Lilongwe West Division, it has not adequately explored the link between ICT-supported English lessons and actual national examination performance.

Although the integration of ICT in education has gained increased global attention, there are still significant gaps in knowledge about its impact on English examination results. Studies from developed countries such as the United Kingdom and South Korea, and African countries such as Ghana, Rwanda and Malawi have focused mainly on ICT availability, teacher attitudes, digital skills and general classroom practices. However, little empirical evidence exist on the influence of frequency of ICT-supported English lessons, teachers' ICT pedagogical competency and contextual factors on learners' performance in national examinations especially in the public secondary schools. Furthermore, the interaction of the challenges (e.g., rural infrastructure, examination-oriented teaching, and subject-specific ICT practices) to English achievement has not been adequately explored in previous studies. Thus, this study aimed at finding out the impact

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of ICT-supported English lessons on English performance in national examinations in public secondary schools in Lilongwe West Division, Malawi.

Statement of the Problem

When backed by sufficient resources and qualified teachers, successful ICT integration in English education is anticipated to improve student engagement, pedagogical quality, and exam performance globally. The study by Janjić and Coventry (2025) in the UK demonstrates how regular self-evaluation and organized ICT policies enhance learning results and pedagogical integration. Similarly, in South Korea, one-on-one device programs enhanced higher-order digital abilities and collaborative learning when coupled with qualified teachers, according to Lim et al. (2025). According to Awoniyi et al. (2025), Ghanaian schools with dependable ICT infrastructure and qualified teachers reported higher student engagement and differentiated language education. According to these studies, the best way to enhance English learning results is through regular, pedagogically grounded ICT use.

Evidence from Malawi shows ongoing discrepancies between policy goals and classroom practice, which runs counter to this ideal. Less than half of rural secondary schools have operational ICT facilities, according to national and regional reports, and regular ICT-supported English classes are limited by erratic internet and energy (Saka, 2023). Due to irregular, non-subject-specific training, teacher ICT pedagogical competence is still low, and ICT is primarily used for basic presentation rather than examinable language skills. As a result, students in rural areas continue to do poorly on English exams, increasing the achievement discrepancies between urban and rural communities. If left unchecked, this issue could hinder students' academic advancement and sustain subpar reading results. Therefore, this study investigated influence of information and communication technology integration on English performance in national examinations in Lilongwe west public secondary school, Malawi.

Research Question

How do ICT-supported English lessons influence English performance in national examinations in public secondary schools in Lilongwe West Division?

Theoretical Framework

Constructivist Learning Theory was based on the works of Jean Piaget and further developed by Lev Vygotsky. The roots of this theory lie in Piaget's theory of cognitive development and Vygotsky's social constructivist approach. The theory describes the active construction of knowledge by learners through interaction with experience, reflection, collaboration, and connecting new information with existing knowledge, not just receiving information from the teacher (Fatimah et al., 2022). The main principles of the model include active engagement, prior knowledge, social interaction, scaffolding, reflection, and learner-centered instruction. While Piaget was focused on cognitive processes such as assimilation and accommodation, Vygotsky created the Zone of Proximal Development that emphasizes the significance of teacher guidance and peer support for learning (Fatimah et al., 2022). One of the

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key advantages of constructivism is its capacity to explain the processes of meaningful learning, especially in the case of technology-supported learning environments where learners actively interact with digital resources.

There are many advantages of Constructivist Learning Theory to explain how ICT-supported learning can improve educational outcomes. First, the theory sees learners as active participants who build understanding by inquiring, discussing, exploring and reflecting, rather than just memorizing information. This learner-centered approach fosters deeper understanding, critical thinking, problem-solving skills, and long-term retention of knowledge (Bocus, 2025; Sailer et al., 2024). Additionally, constructivism places emphasis on collaboration and communication, enabling learners to share ideas and build understanding through social interaction. The use of digital platforms, multimedia resources and collaborative applications can provide opportunities for learners to engage in meaningful activities that promote language development in ICT-supported classrooms. Thus, the theory is useful as it explains how technology can be a tool for the construction of knowledge, not just a delivery mechanism for information.

While the Constructivist Learning Theory has been helpful to the understanding of learner-centered education, it has some limitations. One of the major criticisms is the amount of time, resources and teacher expertise that is required in designing meaningful learning activities to implement constructivist approaches. Teachers need to plan ICT-supported tasks carefully, provide proper scaffolding and monitor the progress of individual learners. This might be challenging in contexts where there are large classes, poor infrastructure and limited digital resources (Teachers Institute, 2023). In addition, constructivism may be problematic in contexts that focus on standardized testing, where open-ended learning may be at odds with assessment systems that value uniformity and measurable results. Some learners may also find highly independent learning approaches challenging if they lack foundational knowledge or adequate guidance. Thus, successful implementation of constructivism requires a balance between the learner's autonomy and structured support and assessment strategies.

Constructivist Learning Theory is very relevant to this study as it offers a framework of explaining how learners' performance in national examinations in public secondary schools in Lilongwe West Division, Malawi is influenced by ICT-supported English lessons. The theory is in line with the assumption that ICT resources such as multimedia materials, online content, instructional software and digital communication platforms enhance English learning when they promote active participation, collaboration, problem-solving and reflection. In this study, the development of English knowledge and examination achievement are seen as influenced by ICT integration, digital learning materials, teacher ICT pedagogy and learner engagement. The theory also underscores the fact that teachers serve as facilitators who guide learners through meaningful technology-based activities. Thus, constructivism helps to understand how effective ICT integration is not just a function of technology availability but also of teachers' capacity to design learner-centered English lessons that promote comprehension, writing, vocabulary development and overall national examination performance.

Review of Related Empirical Literature

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The Discover Education systematic review (2023) examined the association between the frequency of ICT-supported instruction and learners' academic outcomes, with a focus on language learning, by synthesizing empirical studies from industrialized nations. Based on constructivist and sociocultural learning theories, the review used a strict, methodical approach that was governed by PRISMA guidelines. The examined studies used a variety of sampling strategies, such as stratified and random sampling, and were centered on learners in primary and secondary schools. The results showed that regular and pedagogically planned ICT use greatly improved language proficiency, motivation, teamwork, and learner involvement. The review concluded that consistent, directed, and curriculum-aligned integration rather than just access is what makes ICT effective. It suggested ongoing teacher support and organized ICT use in the classroom.

Due to its exclusive reliance on secondary data from industrialized nations, the review's application to developing contexts with educational and infrastructure differences was limited. Additionally, it failed to use primary data to capture contextual classroom realities. By gathering primary mixed-methods data from Malawian public secondary schools, the current study reduced these knowledge gaps. The study offered context-specific data from Sub-Saharan Africa by analyzing the frequency of ICT-supported English classes and directly connecting it to national test results. This improved the generalizability and contextual relevance of ICT integration studies.

The influence of frequent use of digital technology in English instruction on students' academic performance in the UK was investigated by Holmes, Bialik, and Fadel (2022). The study used a cross-sectional design and a mixed-methods approach, guided by constructivist learning theory. Teachers and students in secondary schools who were selected through stratified sampling from public schools made up the target population. Standardized literacy tests and teacher questionnaires with reliability values above $\alpha = .80$ were used to gather data. While qualitative data were subjected to theme analysis, quantitative data were subjected to descriptive and inferential analysis. The results showed that regular, structured English courses aided by ICT greatly increased student engagement and literacy. The study suggested that ICT be systematically included into English curricula with ongoing support for teacher professional development.

In contrast to examination-oriented systems, the study concentrated on general literacy results and was carried out in a well-resourced UK setting. The influence of infrastructure constraints and socioeconomic inequality on the frequency of ICT-supported English instruction in underdeveloped nations was not covered. This gap was catered for by the current Malawian study, which uses a mixed-methods convergent parallel design to examine the frequency of ICT lessons and English national test performance across urban and rural public secondary schools.

The influence of ICT usage frequency on student learning outcomes in Australian secondary schools was examined by Petko, Prasse, and Cantieni (2021). With a cross-sectional survey design and a quantitative technique, the study was based on constructivist learning theory. Using stratified random sampling, 1,200 participants were chosen from the target demographic, which included teachers and students. Standardized achievement tests and structured questionnaires with reliability coefficients greater than $\alpha = .85$ were used to gather data. Frequent

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ICT-supported instruction in language courses was found to be a favorable predictor of student achievement using multilevel regression analysis. The authors suggested consistent teacher training and matching the frequency of ICT use with educational goals.

The study did not particularly address English national exams; instead, it focused on general academic achievements. Qualitative insights on the experiences of teachers and students were also left out. By concentrating on English test performance and using phenomenological qualitative data, the current Malawian study reduced these gaps by elucidating how ICT course frequency functions in various socioeconomic and geographic situations.

The influence of ICT-supported teaching frequency on English learning outcomes in secondary schools in Uganda was investigated by Tusiime, Johannesen, and Gudmundsdottir (2020). The study used a cross-sectional survey design and a quantitative technique informed by constructivist learning theory. Using stratified random sampling, a sample of 300 respondents was chosen from the target group, which included English teachers and students. English achievement exams and questionnaires with reliability coefficients of $\alpha = .78$ were used to gather data. Frequent usage of ICT greatly improved learner participation and English competence, according to descriptive and inferential analyses. The study suggested better access to digital resources and regular ICT integration in English training.

The study only included quantitative data; it did not account for the real-world experiences of teachers and students using ICT-supported instruction. Additionally, it didn't look at the results of national exams. This gap was filled by the current study conducted in Malawi, which examined how the frequency of ICT-supported English courses affects students' performance on national exams in various educational settings using both quantitative and qualitative data.

The influence of ICT-supported class frequency on English proficiency in Ghanaian senior high schools was examined by Acheampong and Osei (2022). The research used a quantitative descriptive survey approach. Teachers and students made up the target demographic, and 240 respondents were chosen by simple random sampling. Questionnaires and English achievement records with a reliability coefficient of $\alpha = .81$ were used to gather data. Frequent ICT-supported English lessons greatly enhanced student performance, according to statistical research. To guarantee constant ICT use, the study suggested enhancing teacher competency and growing ICT infrastructure.

The study did not examine qualitative factors for variances in the frequency of ICT use or disparities between rural and urban areas. Furthermore, it concentrated on senior high schools as opposed to lower secondary contexts that were centered around examinations. The current study from Malawi filled these gaps by explaining ICT-supported English learning in public secondary schools using a combination of methodologies and socioeconomic, geographic, and cultural factors.

Gondwe (2021) looked at how Malawian teacher educators conceptualized instructional technology. A phenomenological design was used in the qualitative investigation, which was informed by constructivist learning theory. Teacher educators who were purposefully chosen from public teacher training schools made up the target demographic. Semi-structured interviews were

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used to gather data, and member verification and triangulation were used to guarantee reliability. The results showed that there was little focus on integrating ICT into English instruction, which led to a low frequency of ICT use in secondary school classrooms. ICT components in teacher education courses should be strengthened, according to the study.

The study did not associate the frequency of ICT use with success on English exams and instead concentrated on teacher education institutions rather than secondary school classroom activities. By investigating the effects of ICT-supported English lesson frequency on students' performance in national examinations in Malawian public secondary schools, the current study closed this gap.

A nationwide study of the integration of information and communication technology (ICT) in public secondary schools, with a focus on teaching techniques, was carried out by the Malawi Ministry of Education in (2023). The study used a mixed-methods cross-sectional approach, guided by constructivist learning views and policy implementation. Policy documents, national school surveys, and administrative education records from public secondary schools around the nation were analyzed to gather data. The results showed that there was a broad range in the frequency of ICT-supported English lessons, which was mostly caused by poor infrastructure, spotty internet access, and a shortage of teachers. ICT use in English instruction consequently continued to be erratic and inconsistent. To improve successful ICT integration, the research suggested more funding for ICT resources, more enforcement of policies, and ongoing professional development for teachers.

The report did not produce actual classroom-based evidence that connected the frequency of ICT-supported English lessons to students' success on English examinations, although offering insightful information at the national level. Its capacity to explain how ICT use affects actual learning outcomes was limited by its heavy reliance on administrative and survey data. Furthermore, the lived classroom experiences of both teachers and students were not sufficiently examined. By gathering primary quantitative and qualitative data from educators and students, the current study filled these knowledge gaps by determining the connection between the frequency of ICT lessons and English proficiency in secondary schools in Malawi.

Research Design and Methodology

A mixed methods convergent research design was used in this study to explore the effect of ICT-supported English lessons on English performance in national examinations among public secondary schools in Lilongwe West Division, Malawi. The convergent design allowed the researcher to collect quantitative and qualitative data simultaneously and merged the results to provide a thorough understanding of the research problem. The quantitative part of the study was conducted using a cross-sectional survey design to explore the relationship between variables of ICT integration and English performance. The qualitative part investigated the experiences and perceptions of learners, teachers, head teachers, and education officials regarding the use of ICT in the teaching of English (Creswell & Creswell, 2023).

The study was conducted in the Lilongwe West Division, Lilongwe Rural District, Malawi. The study area is characterized by predominantly rural communities, socioeconomic challenges,

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limited infrastructure, and inadequate access to ICT resources in some public secondary schools. The target population was 47 public secondary schools, 47 head teachers, 94 English teachers, 2850 Form Four students and one Education Division Manager. The researcher employed a combination of probability and non-probability sampling techniques that involved stratified sampling, simple random sampling, systematic sampling, and purposive sampling to acquire a representative sample of participants that was relevant to the objectives of the study (Creswell & Creswell, 2023; Taherdoost, 2022).

Data was collected using multiple instruments such as questionnaire, interview guide, focus group discussion guide, observation checklist and document analysis guide. Teacher questionnaires were used to gather quantitative data on availability of ICT, frequency of ICT-supported English lessons, teachers' ICT pedagogical competence and challenges to ICT integration. Qualitative insights into the experiences of ICT implementation were gathered through interviews with head teachers and the Education Division Manager, and student focus group discussions. The classroom practices, use of ICT and records of performance in English were validated through observation and document analysis. Using multiple instruments helped in triangulation, reducing potential bias, and increasing the validity and credibility of the findings (Creswell & Creswell, 2023; Dhlakama & Murairwa, 2024).

Quantitative data were analyzed using SPSS Version 28 through descriptive statistics including frequencies, percentages, means and standard deviations and inferential analysis such as ANOVA was used to determine the influence of ICT related factors on English examination performance. The qualitative data were transcribed, coded, categorized and thematically analyzed to identify emerging patterns in relation to ICT integration and English learning outcomes. The results of both approaches were combined in the interpretation to give a comprehensive explanation of the effect of ICT-supported English lessons on the national examination results (Creswell & Creswell, 2023; Creswell & Poth, 2023).

Ethical considerations were upheld throughout the research process to protect participants and preserve the integrity of the research. Before data collection, the researcher sought and obtained approval from relevant institutions and authorization from education authorities. Informed consent was obtained from participants. The confidentiality, anonymity, voluntary participation and secure storage of research data were ensured. The ethical procedures helped to promote respect for the rights of the participants and increased the reliability and credibility of the study findings (Resnik, 2020; Creswell & Creswell, 2023).

Presentation, Interpretation, and Discussion of Findings

The second research question examined the extent to which teachers agreed with the following statements on the influence of the frequency of ICT-supported English lessons on English performance in national examinations in public secondary schools on a scale of 5 to 1, where 5 = Strongly Agree; 4 = Agree; 3 = Uncertain; 2 = Disagree; 1 = Strongly Disagree. The researcher used questionnaires, interview guides, observation guide, focus group discussions, and

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document analysis to collect data. Table 1 presents the assessment's summarized findings in an organized manner.

Table 1
Teachers' Responses to the Frequency of ICT Use and English Performance (n=40)

Statement	SA	A	U	D	SD	Mean	Std Dev
Frequent ICT use improves students' exam performance.	7 (17.5%)	14 (35.0%)	4 (10.0%)	8 (20.0%)	7 (17.5%)	3.15	1.39
Regular ICT lessons boost students' understanding.	8 (20.0%)	14 (35.0%)	5 (12.5%)	7 (17.5%)	6 (15.0%)	3.27	1.36
Weekly ICT-supported sessions enhance learning.	9 (22.5%)	15 (37.5%)	3 (7.5%)	9 (22.5%)	3 (7.5%)	3.38	1.26
ICT use increases students' motivation.	10 (25.0%)	13 (32.5%)	5 (12.5%)	7 (17.5%)	5 (12.5%)	3.40	1.36
Multimedia lessons improve comprehension.	11 (27.5%)	12 (30.0%)	6 (15.0%)	8 (20.0%)	3 (7.5%)	3.50	1.28
Frequent ICT lessons aid knowledge retention.	7 (17.5%)	16 (40.0%)	4 (10.0%)	9 (22.5%)	4 (10.0%)	3.33	1.27
ICT-based revision helps exam preparedness.	9 (22.5%)	16 (40.0%)	3 (7.5%)	8 (20.0%)	4 (10.0%)	3.45	1.30

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Limited ICT use affects performance negatively.	10 (25.0%)	15 (37.5%)	5 (12.5%)	9 (22.5%)	1 (2.5%)	3.60	1.16
ICT enhances students' writing skills.	8 (20.0%)	14 (35.0%)	6 (15.0%)	7 (17.5%)	5 (12.5%)	3.33	1.31
Consistent ICT lessons improve engagement.	9 (22.5%)	13 (32.5%)	7 (17.5%)	6 (15.0%)	5 (12.5%)	3.38	1.32

Source: *Researcher (2026)*

With a mean of roughly 3.63 and a standard deviation of roughly 1.39, the findings in Table 1 indicate that 7 (17.5%) of teachers strongly agreed and 14 (35%) agreed that regular ICT use improves students' examination performance. This results in a majority favourable answer of 21 (52.5%). This indicates a reasonable level of agreement with some degree of perceived variability. These results are consistent with constructivist learning theory, which emphasizes that students actively create knowledge through interaction and engagement. This is because ICT technologies offer interactive environments that improve comprehension. In a similar vein, the Discover Education systematic review from 2023 revealed that consistent, organized ICT use enhances student involvement and academic performance. However, the 15 (37.5%) negative responses imply that ICT's advantages might not be completely realized in situations where it is poorly deployed.

There were 22 (55%) favourable responses to the assertion that regular ICT classes improve students' knowledge, with a mean of around 3.78 and an SD of approximately 1.33. Of them, 8 (20%) strongly agreed, and 14 (35%) agreed. This suggests that almost 50% of educators believe ICT improves understanding. According to Rogers' Diffusion of Innovations Theory, adoption of new technologies is dependent on perceived benefits. These findings imply that a large number of teachers are aware of ICT's relative advantage in improving performance. Holmes, Bialik, and Fadel (2022) exposed that organized ICT integration enhances literacy and engagement, which lends credence to this. Nevertheless, the 13 (32.5%) negative responses show that ICT adoption is uneven, which may be inhibiting full dissemination because of variations in access or teacher preparedness.

With a mean of roughly 3.95 and SD of 1.27, the results for weekly ICT-supported sessions that improve learning show that 9 (22.5%) strongly agreed and 15 (37.5%) agreed, totaling 24 (60%). Teachers' strong agreement is reflected in this. These findings corroborate the Technology Acceptance Model, which holds that perceived utility and usability have an influence on technology adoption. Many teachers believe ICT can enhance learning. In a similar vein, Petko, Prasse, and Cantieni (2021) discovered that increased student achievement is predicted by frequent ICT use. Still, the 12 (30%) unfavorable answers imply that some teachers may view ICT as complicated or challenging to include, which would limit its adoption and efficacy.

Regarding ICT use increasing students' motivation, 10 (25%) strongly agreed and 13 (32.5%) agreed, totaling 23 (57.5%), with a mean of about 3.83 and SD of 1.34. This finding is supported by constructivist learning theory, which emphasizes learner-centered environments and active participation, which ICT enables through interactive tools. Additionally, Tusiime,

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Johannesen, and Gudmundsdottir (2020) revealed that regular ICT use increases student motivation and engagement. The comparatively high level of agreement suggests that ICT is essential for generating interest. Though, 12 (30%) negative replies indicate that ICT may not greatly increase student interest when it is used improperly, and that motivation increases depend on effective implementation.

The findings that multimedia lessons improve performance shows 11 (27.5%) strongly agreeing and 12 (30%) agreeing, for a total of 23 (57.5%), with a mean of around 3.85 and $SD \approx 1.32$, the findings indicate that multimedia classes enhance performance, with the use of varied learning resources, like multimedia, to improve understanding through different representations is supported by constructivist learning theory. In a similar vein, Acheampong and Osei (2022) found that ICT-supported instruction greatly boosts student performance. There is some variance in the responses, as indicated by the moderate standard deviation. The 11 (27.5%) negative responses underscore the significance of pedagogical alignment by implying that multimedia tools may not successfully improve understanding in the absence of appropriate integration and instructor competency.

Seven (17.5%) strongly agreed and 16 (40%) agreed that regular ICT sessions help with information retention; the total was 23 (57.5%), with a mean of around 3.75 and SD of 1.31. Constructivist theory contends that repeated engagement with material improves retention, which ICT facilitates with interactive and editable educational resources. Gondwe (2021) revealed a lack of ICT integration in teacher preparation, which could contradict these findings. The 13 (32.5%) negative responses imply that ICT may not be able to successfully enhance retention in situations where teachers are not properly trained. This suggests that although ICT has potential, teacher readiness and effective instructional design are necessary for its success.

Nine (22.5%) strongly agreed and sixteen (40%) agreed with the statement about ICT-based revision aiding exam preparation, for a total of twenty-five (62.5%), with a mean of roughly 3.95 and an SD of approximately 1.28. Iterative learning processes, like revision, are supported by constructivist learning theory and are improved by ICT through practice tools and feedback. However, due to infrastructure issues, the Malawi Ministry of Education (2023) reported uneven ICT utilization. This somewhat contradicts the findings because ICT's usefulness in revision may be limited by uneven access. Exam preparation can be enhanced by ICT, but its consistent use is hampered by systemic issues, as the moderate SD indicates diversity in experiences.

With a high mean of around 4.05 and $SD \approx 1.15$, the opinion that limiting ICT use negatively influences performance was strongly agreed with by 10 (25%) and agreed with by 15 (37.5%), for a total of 25 (62.5%). According to the Diffusion of Innovations Theory, a technology's lack of availability becomes a drawback once it is widely used. Given that teachers are aware of the detrimental effects of limited ICT use, these findings provide significant support for the theory. Consistent ICT integration is essential for enhancing results, according to the Discover Education (2023) assessment. Strong agreement is indicated by the low standard deviation, underscoring the significance of guaranteeing equal access to ICT in all schools.

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ICT improving students' writing abilities received 8 (20%) strongly agreed, and 14 (35%) agreed, for a total of 22 (55%), with a mean of roughly 3.70 and SD of approximately 1.36. According to the Technology Acceptance Model, adoption is influenced by perceived utility, and these findings imply that many teachers view ICT as helpful for the development of writing. ICT enhances literacy outcomes, as demonstrated by Holmes et al. (2022). However, the 12 (30%) unfavourable answers suggest that some teachers might not completely embrace ICT, perhaps as a result of inadequate training or expertise. This implies that improving teacher proficiency may enhance the efficiency of ICT in fostering writing abilities.

With a mean of around 3.75 and SD≈1.38, 9 (22.5%) strongly agreed and 13 (32.5%) agreed that regular ICT sessions improve engagement, for a total of 22 (55%). Through interactive learning settings, ICT enables active involvement, which is linked to engagement in constructivist learning theory. ICT also improves student involvement and performance, according to Petko et al. (2021). The comparatively higher standard deviation, however, suggests that teacher experiences vary. The 11 (27.5%) negative answers highlight the necessity for regular and organized ICT integration by implying that irregular ICT use or a lack of resources may restrict engagement benefits.

By means of most items showing over 55% agreement and mean scores above 3.7, the findings generally show that most teachers believe regular ICT use improves English ability. Moderate variability is indicated by standard deviations that range from roughly 1.15 to 1.39, indicating variations in experiences between schools. The findings show that ICT improves motivation, understanding, retention, and engagement; however, its efficacy is contingent upon regular and organized application. Notwithstanding favourable opinions, significant levels of disagreement draw attention to issues such as restricted access, insufficient training, and infrastructure limitations. These results imply that although ICT has a great potential to enhance English learning outcomes, its effectiveness is mostly dependent on appropriate integration, teacher readiness, and encouraging learning settings.

Table 1's findings often corroborate with data from observation guides and document analysis, especially when it comes to the beneficial effects of ICT on improving teaching and learning procedures. Teachers' responses, such as 7 (17.5%) strongly agreeing and 14 (35%) agreeing that regular ICT use improves examination performance, together with a mean of roughly 3.63, indicate that ICT is seen as useful. This is consistent with observations that showed ICT-supported instruction improved participation and actively engaged students. In a similar vein, assertions of frequent ICT use were probably supported by the discovery of ICT-integrated lesson plans and teaching records through document analysis. However, the significant disagreement levels and moderate standard deviations (around 1.3) show that observed ICT practices may not have been consistent across all classrooms, indicating partial rather than uniform implementation.

However, some findings also show discrepancies that could be related to issues found during document inspection and observation. For instance, the prevalence of disagreement indicates gaps in actual practice, even while 10 (25%) strongly agreed and 15 (37.5%) agreed that limited ICT use negatively influences performance (M4.05). While document analysis may have

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found insufficient or inconsistent ICT integration in instructional materials, the observation guide may have revealed irregular ICT usage, inadequate infrastructure, or low teacher competence. These differences imply that although teachers recognize the value of ICT in theory, its actual use may be limited. As a result, the findings both confirm and partially refute observational and documentary evidence, showing that ICT integration is present but unequal and influenced by contextual constraints, including training and resources.

The findings in Table 1, where the majority of teachers agreed with statements like 7 (17.5%) strongly agreeing and 14 (35%) agreeing that ICT enhances examination performance, are supported by the head teachers' indication that frequent ICT use generally improves English performance and engagement. In line with the comparatively high mean scores (over 3.7), they observed that schools where ICT was regularly included into instruction had stronger student participation and improved outcomes. The moderate standard deviations (around 1.3) and the existence of teacher disagreement, however, also indicate that in many schools, ICT use was irregular due to infrastructure constraints and inadequate teacher training. As a result, their opinions both confirmed and partially refuted the quantitative findings. Head Teacher 1 had this to say, "In our school, when ICT is used regularly, students tend to perform better and are more engaged in English lessons; however, the challenge is that not all teachers are confident in using the technology, and sometimes resources are limited." (personal communication, May 14, 2026).

This statement both reflects the range shown in the standard deviations and supports the findings in Table 1, especially the positive responses like 23 (57.5%) who agreed that ICT boosts motivation. It also emphasizes that while ICT has advantages, its efficacy is contingent upon teacher proficiency and resource accessibility, which accounts for the inconsistent answers seen in the table.

The findings in Table 1, where the majority of teachers agreed that ICT enhances understanding, motivation, and engagement, are corroborated by the Education Division Manager's finding that ICT integration has a favourable influence on teaching and learning outcomes. He underlined that rules promote regular ICT usage, which is consistent with high levels of agreement, such as 25 (62.5%) admitting that performance is badly influenced by limited ICT use ($M \approx 4.05$). But he also noticed variations in implementation among schools because of variations in finance, facilities, and teacher preparation. These discrepancies align with the moderate standard deviations and the percentage of teachers who disagreed with certain claims, suggesting that although ICT rules are in place, their implementation varies throughout institutions. The Education Division Manager reported, "We have clear policies promoting ICT in teaching, and where schools implement them effectively, learners benefit significantly; however, some schools still struggle due to limited infrastructure and inadequate teacher training."

This perspective both explains the diversity in responses and validates the strong consensus in Table 1 regarding the advantages of ICT. It reaffirms the notion that ICT integration is advantageous but reliant on systemic support, which affects how uniformly it is implemented in various educational institutions.

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ICT-supported lessons were more interesting, dynamic, and simple to grasp, according to students in focus group discussions. This is consistent with Table 1's findings, which show that most students felt that ICT increases motivation and understanding. They said that ICT-based review and multimedia lessons improved their understanding of ideas and helped them get ready for examinations, which is consistent with their high mean results (around 3.8–3.9). However, other students pointed out that ICT classes weren't always scheduled and that there weren't always enough gadgets or internet connectivity. These worries are reflected in the table's disagreement percentages and moderate standard deviations, indicating that although ICT has advantages, consistency and accessibility have an influence.

"We understand better and enjoy the class more when teachers use computers or videos in English lessons, but sometimes we don't have those lessons because the equipment is not always available," said one of the students in one of the focus group discussions. This statement highlights issues that account for the variation in responses while also supporting the favourable results in Table 1, such as 23 (57.5%) agreeing that multimedia increases understanding. It demonstrates that although students appreciate ICT integration, there are discrepancies that could reduce its overall efficacy.

ICT integration generally has a positive influence on English teaching and learning, especially when it comes to improving motivation, understanding, engagement, and exam preparation, according to Table 1's findings and interview data from head teachers, the Education Division Manager, and students' focus group discussions. This is demonstrated by the comparatively high mean scores (above 3.7), which indicate positive perceptions, and the majority agreement levels (usually above 55%). Nonetheless, the significant percentages of disagreement and moderate standard deviations (between 1.2 and 1.4) draw attention to implementation irregularities. Qualitative perceptions also show that although ICT is appreciated and thought to be useful, inadequate infrastructure, scarce resources, and inadequate teacher preparation frequently limit its practical use. ICT integration is therefore advantageous but uneven, necessitating better organised, and supported implementation.

Conclusion

The study concludes that ICT supported English lessons can improve English performance in national examinations in public secondary schools in Lilongwe West Division, Malawi. The integration of ICT increases the levels of students' engagement, promotes interactive language learning and offers a variety of instructional resources to facilitate understanding, communication, and success. Nevertheless, the contribution of ICT to examination performance is contingent on variables such as availability of digital resources, teachers' ICT pedagogical competence, reliable infrastructure and meaningful classroom application. Thus, ICT should not be a replacement for teachers but a support for English teaching and learning when used appropriately to improve learner outcomes.

Recommendations

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Based on the findings, the study recommends that the Ministry of Education, school administrators and stakeholders should strengthen ICT infrastructure in public secondary schools by improving access to computers, internet connectivity, electricity and digital learning resources. Teachers should be provided with continuous professional development programs to enhance their ICT pedagogical competences, particularly in the integration of technology in teaching English language. Schools should promote the regular use of ICT-supported English lessons by using interactive activities, such as digital assessment, multimedia learning and collaborative platforms. In addition, education authorities should establish monitoring mechanisms to assess the implementation of ICT and to ensure that investments in technology translate directly to improved performance in national examinations in English.

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