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Trends in the Utilization of E-learning Platforms for Quality Teaching by University Lecturers in Selected Universities in Kenya

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Abstract: Digitization of university education with innovation in ways and methodologies of teaching has gradually changed the way teachers teach. University lecturers have in the past underutilized e-learning platforms in day-to-day teaching due to insufficient ICT facilities, support and training. This study, therefore, aimed to explore the tech-savvy enablers of lecturers' preparedness for quality teaching through e-learning platforms in selected universities in Kenya. The study's particular goal was to; establish trends in the utilization of e-learning platforms for quality teaching by university lecturers. The study was anchored on Unified Theory of Acceptance and Use of Technology (UTAUT). A descriptive survey design which employed mixed research methodology guided by the Scientific Method Approach methodology envisioned by Noah and Eckstein. This study targeted a population of 1251 lecturers in the selected universities in Kenya in which it obtained a sample of 125 university lecturers, 5 Deans of school, 1 acting dean of school, 2 deputy deans of school, 1 head of ICT, 1 representative of digital school dean and 1 representative of ICT directors. Simple random sampling was employed to obtain data from 103 lecturers drawn from different schools within the selected universities. Data was collected through the Google Document questionnaire that was shared through the lectures mails and in-person interviews were conducted on university administrators. The data obtained was cleaned, organized, processed and analysed quantitatively on Statistical Package for Social Sciences (SPSS) software whereas recorded interviews were transcribed and presented qualitatively in line with the study's themes. The findings revealed that a majority of lecturers in University Y (92.8%) and University Z (65%) taught through e-learning platforms in their previous semester and more than three quarters of the lecturers in both universities preferred to teach from home. A majority in University Y (83.1%) and 80% in University Z utilized blended mode when teaching through the platforms and were highly motivated by the institutional policy on e-learning to teach through the platforms.

Keywords: *E-learning Platforms, University Lecturers, Quality Teaching and Teaching Via E-learning Platforms.*

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I. INTRODUCTION

Educators are expected to be tech-savvy to keep up with evolving technology in education that is ever changing in the current World. Several universities in the American continent, Europe, Asia, Australia, and Africa engage in high-tech education which improves access and quality. Digitization of education recently rose rapidly to the top of the agendas in universities across the world. As Bilyalova et al. (2019) pointed out, the digital transformation that took place across the globe was more than just a tool; it is a flexible environment that facilitate learning at a convenient location, time and space. Both in-person and virtual classrooms benefited from the new technological tools for instruction since curriculum content can be presented using different formats; in video, audio, text or a combination of two or all at the same time when teaching.

Sustainable Development Goal (SDG) 4 envisions the immensity that "ensures inclusive, equitable quality education and promotion of lifelong education for all," (United Nations, 2015). Investments made in ICT, administrative systems, and retooling of educators contribute to wider access to education through digital platforms. Target 4.3 of SDG4 stated that "ensure equal access to affordable quality technical, vocational and tertiary education, including university by 2030 for all." The target spelt the significance of quality in university training for sustainable growth, and in

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addition, it emphasises teaching as one vital element to acquiring useful skills and knowledge. Ketlhoilwe et al. (2020) noted that universities generate new knowledge and disseminate it to members of society where people could break the cycles such as poverty through quality education. Although teaching through e-learning platforms has not yet been acknowledged to predominate physical teaching in universities the quality of teaching via digital devices could improve when educators get retooled frequently.

E-learning evolved as Computer Assisted Instruction (CAI) in 1955 (Aparicio et al., 2013), it gained roots and was predicted to eradicate physical lectures in future. E-learning has developed into a potent technology that universities utilise to reach audiences of students since the 1970s. Times Higher Education (THE) performed a poll of 200 educators drawn from about 1000 institutions which revealed that "about 19% of the educators thought that by 2030 digital technology could eradicate lectures that are physical while 65 % disagreed" (Matthews, 2020). On the other hand, Mwangi (2022) noted that various ICTs were used as knowledge transfer highways where technological breakthroughs were changing the way people lived, worked and thought. Teaching and learning through digital platforms expands rapidly with excellent accessibility to internet-connected gadgets such as computers, smartphones, tablets and laptops (Cidral et al., 2018). With the aid and support of such devices, lecturers could instruct in flexible and customized ways via e-learning platforms without necessarily being present in a physical classroom.

II. REVIEW OF RELATED LITERATURE

Events in this instance, the e-learning trend, are presented in chronological order, also known as time order, in the chronological sequence in which they happened. Classes that are entirely online, partially online, or both employ electronic learning techniques, conceptually, e-learning which is developing chronologically (Aparicio et al., 2013). Another researcher, Zinn (2000) noted that "e-learning systems have their roots in the concept of Computer Assisted Instruction (CAI)," and further defined CAI as the use of computer devices in providing practice exercises to students, and encouraged participation in a discourse that regarded the content taught. Aparicio et al (2013) affirmed that CAI first emerged in the classroom around 1955 due to a shift in how problems were presented and solved, and was later termed Computer Assisted Learning (CAL) in the 1980s. CAI further evolved to several other names in early 2000 to "Computer Assisted Education (CAE), Computer Based Education (CBE), and Computer Managed Instruction (CMI)" according to Aparicio et al., (2013). Further, in 2001, names such as: Electronic Learning (e-learning) and LMS replaced CAI. Advancement in technology saw e-learning conducted through mobile devices commonly referred to as Mobile learning (m-learning) and on video conferencing platforms such as Zoom and Google Teams also known as online learning.

Shih et al. (2008) examined about 444 papers in "Research and Trends in the Field of E-learning from 2001 to 2005: A Content Analysis of Cognitive Studies in Selected Journals." The survey reported 3 popular study subjects: one, teaching methods in e-learning, metacognition that refers to reflection, perception, attitudes or awareness and e-learning environment. Additionally, Shih et al. contended that interactive e-learning environment was prevalent and investigated the most pointing a gap on inadequate studies on lecturer preparedness to teach via the platforms. Researchers' Shih et al. pointed out a majority of the articles evaluated employed descriptive research technique. Furthermore it was noticed the popularly utilized data collection instrument was a questionnaire. However, this study sought to employ descriptive technique and utilize both in-person interview and a questionnaire to complement and enrich data and fill a gap identified in Shih et al. research.

Researchers' Maurer and Khan (2010) used clustering programme for data (gCLUTO) in "Research Trends in the Area of E-learning from 2003 to 2008: A Scientometric and Content Analysis for Selected Journals and Conferences Using Visualization." Among the driving forces of doing the inquiry was to find current e-learning direction when using custom method of visualising data. Broken down trends reported included "instructional educational technology; instructional process; teaching and learning perspectives; instructional methods; instructional delivery mode; instructional development; instructional production variables; the learner; the learning environment; the evaluation; and the culture" with insufficient reporting on differences in educators' age, experience or gender readiness to teach using digital platforms. In another study surfacing trends in utilizing digital platforms in HEIs by researchers' Njenga and Fourie (2010), an estimate of 10 myths reported from various channels such as opinion and information garnered from tech companies, prevalent beliefs, digital instruction and scholarly articles emerging. This study aspired to investigate the situation and understand the trend in e-learning utilization in teaching at university by university, experience, gender, and age and debunk myths that developed around it.

Bozkurt et al., (2015) analysed trends in distance education and ideas in 7 academic journals; of which technology teaching and learning, instructional design, and student uniqueness accounted for 51% of the 15 research areas. Bozkurt et al. noted that distance education researchers employed different theoretical frameworks to explain and explore the field but preferred qualitative, quantitative, or mixed research designs. Bozkurt et al. pointed out that most qualitative investigation employed case studies, quantitative fields on inquiry used surveys, while mixed methodologies utilized explanatory and exploratory inquiry. The analysis also found that variables in distance education studies focused on learners' feelings, emotions, and behaviours and most research papers seemed to concentrate on higher education learners. Bozkurt et al. analysis showed that major participants of most research studies were students in universities, and that variables focused on learners' sentiments, emotions, and behaviours. This study identified a gap of knowledge in Bozkurt et al. analysis concerning the target population and focused on lecturers' trend in utilization of e-learning platform for teaching in universities.

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Gitau (2016) surveyed about 184 respondents through questionnaires comprising of students (136) and lecturers (48) in "Application of the UTAUT Model to Understand Factors Influencing the Use of Web 2.0 Tools in E-learning in Kenyan Public Universities." Gitau reported that at the investigated universities, the most widely utilised digital resources were social media networks. In the investigation, YouTube was reported as most popular social media used followed by Facebook and then Twitter (now known as X social). Whereas in another study by Lima et al. (2019), about 60 universities were examined on factors that led major universities in Brazil to choose Moodle as their preferred online learning platform. The findings of Lima et al. indicated "48 used Moodle, 7 used Virtual Class, 2 used Canvas and the other mentioned environments are used by … usually its creator." Lima et al. also reported presence of Canvas and Virtual Class as alternative interactive digital platforms. Gitau's study and Lima et al. trends focused on social media and Moodle learning platforms and left a gap on technologies of learning such as video conferencing (Zoom and Google Teams) in lecturers' utilisation of e-learning platforms for teaching in universities.

Further, Valverde-Berrocoso et al. (2020) carried out an analysis of about 248 articles in "Trends in Educational Research about e-Learning: A Systematic Literature Review (2009–2018)." Three major nodes found from the investigation included: e-learning and curriculum, online teachers and online students in respect to e-learning. The results of the study revealed the common studied terms as: MOOC, instructional approaches, higher education and stimulating learning environments in which MOOC was pointed out as the mode most-studied in the analysis. In addition, Technology Acceptance Model (TAM) and Community of Inquiry (CoI) were found to be the preferred theoretical frameworks; however these theories were insufficient to describe why users reject or accept new technology in teaching. It also revealed that case studies were majorly employed in qualitative inquiry. Since 2009, studies forsake techno-centrism (devices and applications) and shifted attention to the educational process and its key agents being students, instructors, and curriculum (Valverde-Berrocoso et al., 2020). The current study used UTAUT model to bridge the gap of knowledge in acceptance or rejection of new technology in teaching.

Kibuku et al. (2020) presented the difficulties encountered in providing and implementing e-learning in HEIs in Kenya. The literature on issues with e-learning was identified and examined using scoping review process. Some of the challenges revealed were: innovations in technology, inadequate policies, ICT infrastructure, budgetary constraints, inadequate technical and pedagogical skills, lack of training among learners and teachers, issues with quality and sustainability, lack of collaboration and negative perceptions. In addition, another study on e-learning difficulties in Kenya as of E-learning Africa (2019) included difficulties brought on by poverty, limited bandwidth, inadequate ICT skills, inadequate financing and sustainability of ICT. Nonetheless, all institutions encounter different challenges and when the difficulties are similar in other institution, circumstances vary and therefore this study aimed to present the current trend in lecturers' utilization of e-learning for teaching in selected Kenyan universities.

Analysing e-learning from a chronological order, it was evident that electronic learning evolved and the conceptual name for use in digital education to deliver learning and training is continuously evolving today and in the future to come. Researchers' Aparicio et al. (2013) and Valverde-Berrocoso et al. (2020) noted; online, mobile and virtual kinds of learning, MOOCs, distance education and LMSs as examples of ideas, concepts and approaches that make use of computers in teaching and learning. In the past years, electronic learning (e-learning) focused on task accomplishment and subsequently shifted its focus on the students' preparedness more unlike the educators, in this case; the lecturers. Currently, electronic learning approaches have regarded possibilities of the internet to overcome location, space and time barriers to education, but there are inadequate studies on preparedness of the lecturer to instruct through digital platforms.

III. METHODOLOGY

Descriptive research survey design that employed quantitative and qualitative paradigms was adopted to explore the Trends in the Utilization of E-learning Platforms for Quality Teaching by University Lecturers in Selected Universities in Kenya**.** The design was suitable it helped describe the population characteristics, compare phenomena and establish relationships in lecturers' utilization of e-learning for teaching (Kothari, 2017). The study was further guided by Scientific Method Approach envisioned by Noah and Eckstein (1969) with steps such as: identification of a problem, formulation of research questions, definition of operational terms, and selection of units of study, data collection, analysis and interpretation. This study targeted a population of 1251 lecturers in the selected universities in Kenya in which it obtained a sample of 125 university lecturers, 5 Deans of school, 1 acting dean of school, 2 deputy deans of school, 1 head of ICT, 1 representative of digital school dean and 1 representative of ICT directors. Simple random sampling was employed to obtain data from 103 lecturers drawn from different schools within the selected universities. In order for a research study to be regarded valid, Kombo and Trump (2006) contended a size of at least 10% is acceptable in social sciences. The researcher used 10% of 1251 lecturer's as the study sample size of lecturers the summary was presented in Table 1.

Table 1 Summary of Sampling Frame

Population	Target Population	Sample	Sampling Technique
Universities	Two universities	A public and a private	Purposive
University lecturers	1251	125	Simple random
Deans of Schools, Deputy or Acting deans	12	9	Purposive
Head of ICT/ Director ICT	2	2	Purposive

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Total	**1265**	**136**	

Source: Kimutai, Wawire and Gathara, (2025)

Data was collected through the Google Document questionnaire that was shared through the lectures mails and in-person interviews were conducted on university administrators. The data obtained was cleaned, organized, processed and analysed quantitatively with the help of Statistical Package for the Social Sciences (SPSS) software version 27 and presented in graphs, tables, frequencies and percentages whereas qualitative data was analysed qualitatively and data was presented as direct quotations, verbatim and narrations in line with the study's theme.

IV. DISCUSSION OF RESEARCH FINDINGS

Information was obtained from: university lecturers through a questionnaire, university deans of school through in-person interviews and ICT directors' again through in-person interviews. It emerged all the selected universities utilized e-learning platforms; University Y utilized Moodle LMS while University Z utilized Blackboard Learn. The study was interested to understand the level of ICT competence of the lecturers as one of the pre-requisite for utilization of e-learning platforms for teaching. To achieve this, university lecturers were asked to rate their level of ICT competence through self-report test in the questionnaire as presented in table 2.

Table 2 Lecturers Self-Report Test on Level of ICT Competence by University

Level of ICT Competence	**University Y**		**University Z**		**Total**	
	F	%	F	%	F	%
High	36	43.4%	11	55.0%	47	45.6%
Medium	47	56.6%	9	45.0%	56	54.4%
Low	0	0.0%	0	0.0%	0	0.0%
Total	83	100.0%	20	100.0%	103	100.0%

Source: Kimutai, Wawire and Gathara, (2025)

Table 2 illustrates majority 56.6% of the lecturers in University Y reported their level of ICT competence was medium level and 43.4% reported their level of ICT competence was high whereas in University Z majority (55.0%) of the lecturers reported a high level of ICT competence and 45.0% reported a medium level of ICT competence. In total, majority of the respondents 54.4% reported medium level of ICT competence while 45.6% reported a high level of ICT competence. In both universities, there were no lecturers reporting a low level in ICT competence based on the self-report test. It revealed lecturers were competent to utilize e-learning platforms for teaching.

The categorization of ICT competence was important to this study to analyze trends within the categories and other variables such as gender, age and teaching experience through e-learning platforms. Table 3 presents the gender by self-report test on level of ICT competence.

Table 3 Gender by Self-Reported Level of ICT Competence

Gender	**Self-Report Level of ICT Competence**				**Total**	
	High		**Medium**			
	F	%	F	%	F	%
Male	26	55.3%	25	44.6%	51	49.5%
Female	21	44.7%	30	53.6%	51	49.5%
Non-binary	0	0.0%	1	1.8%	1	1.0%
Total	47	100.0%	56	100.0%	103	100.0%

Source: Kimutai, Wawire and Gathara, (2025)

When gender and self-reported test of ICT competence of the lecturers were cross-tabulated, majority 26 (55.3%) of the total lecturers (47) those who reported a high level of ICT competence were male while 44.7% (21) were female. On the other hand, a total of 56 lecturers reported medium level of ICT competence. It emerged that a bigger percentage 53.6% (30) were female, 44.6% (25) were male and 1.8% (1) did not disclosed their gender and preferred to report their gender as non-binary.

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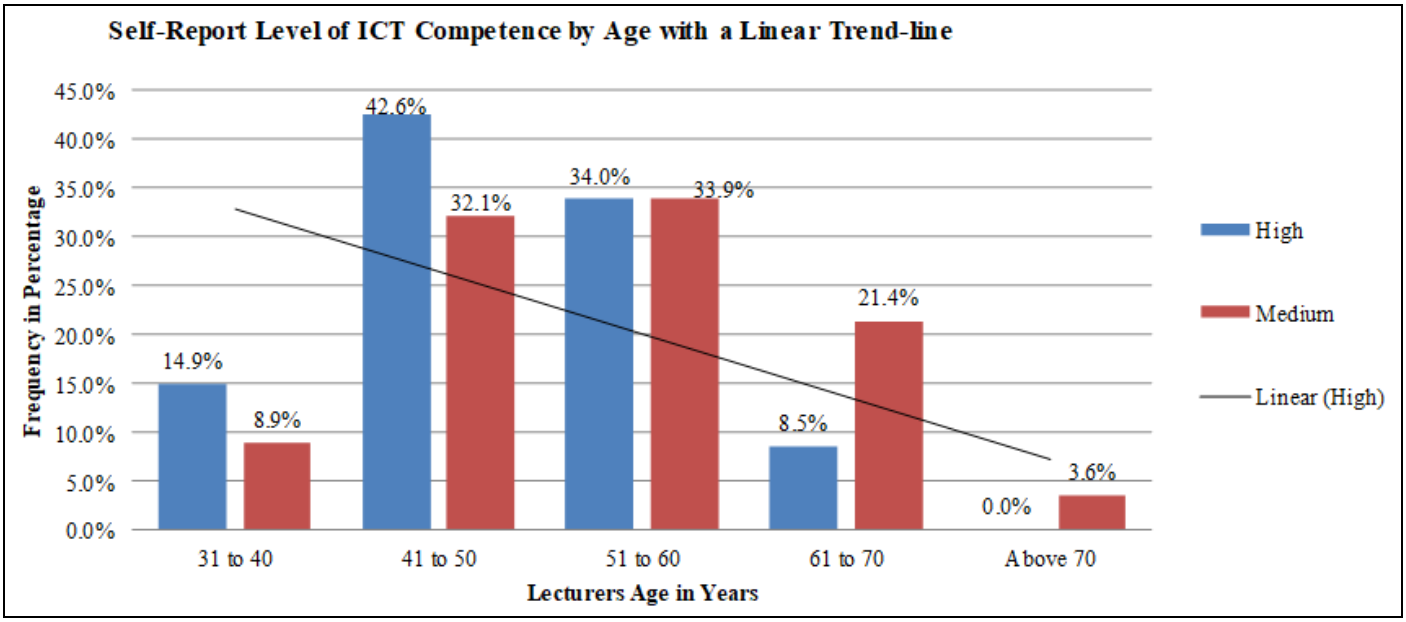

Fig 1 Self-Report Level of ICT Competence by Age with a Linear Trend-Line on High Level of ICT Competence
Source: Kimutai, Wawire and Gathara, (2025)

From figure 1, majority 14.9% of lecturers aged between 31 to 40 years reported high level of ICT competence while 8.9% reported medium level. Majority of lecturers aged between 41 to 50 years 42.6% reported high level of ICT competence compared to 32.1% who reported medium level. Lecturers aged 51 to 60 years, 34.0% reported high level of ICT competence while 33.9% reported medium level. The lecturers aged 61 to 70, 8.5% reported high level of ICT competence while 21.4% reported medium level. Lecturers above 70 years reported medium level of ICT competence. From the analysis in figure 1, a linear trend line was established to understand the trend on lecturers' self-reported ICT competence and age. The linear trend-line on lecturers with high ICT competence in figure 1 showed that younger lecturers appeared to have high ICT competence when compared to older counterparts and this might be because of generational changes and technological evolution which might have favored younger staff that grew in the era of technological changes and advancement.

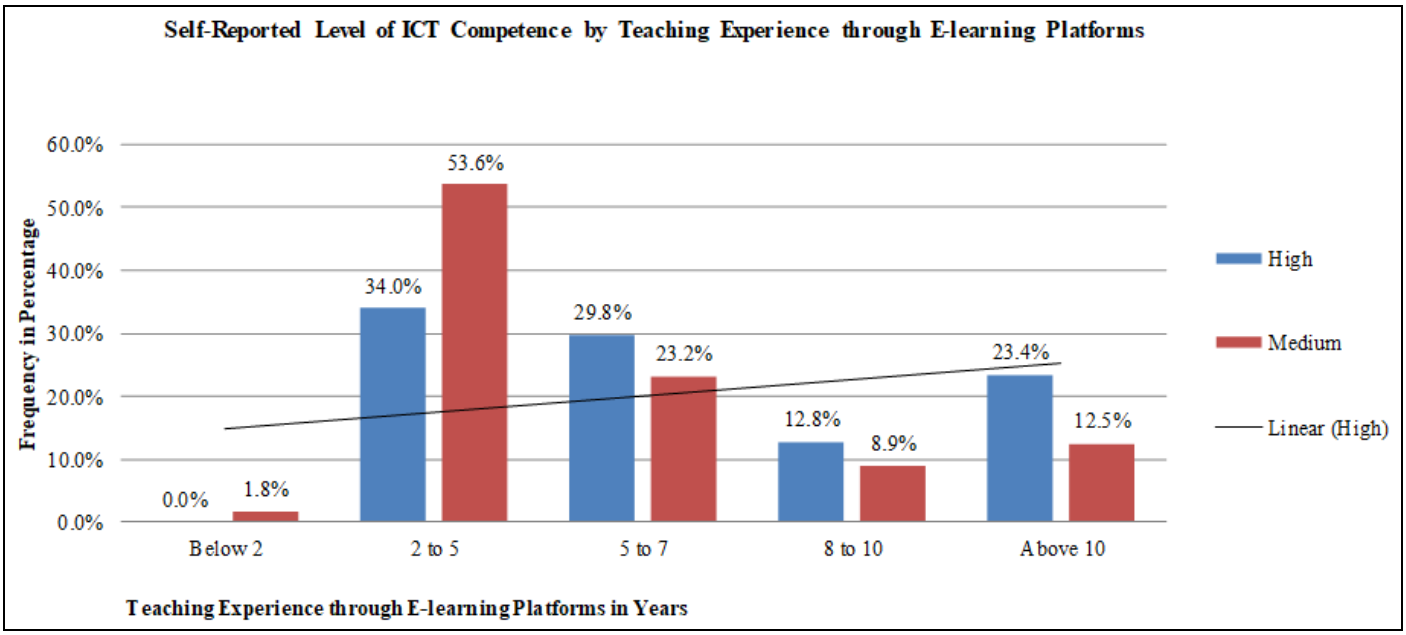

Fig 2 Self-Reported Level of ICT Competence by Teaching Experience Through E-learning Platforms
Source: Kimutai, Wawire and Gathara, (2025)

In figure 2, lecturers (1.8%) whose teaching experience was below 2 years reported medium level of ICT competence. Majority of the lecturers 53.6% with 2 to 5 years teaching experience reported their level of ICT competence as medium while 34.0% reported high level. On lecturers whose teaching experience was between 5 to 7

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years, a bigger percentage 29.8% reported high level of ICT competence while 23.2% reported medium level. Again lecturers whose experience was between 8 to 10 years, a bigger percentage 12.8% reported a high level of ICT competence while 8.9% reported medium level. The lecturers whose teaching experience was above 10years; a bigger percentage 23.4% reported a high level of ICT competence while 12.5% reported medium level. In figure 2, a linear trend-line was established to understand lecturers' trend on ICT competence level and teaching experience through e-learning platforms. The linear trend line showed that ICT competence increased with experience in years of teaching through e-learning platforms. As a result, lecturers who continue to teach through e-learning platforms are likely to become more competent in teaching via the platforms as their expertise grows.

The finding was highlighted by Alenezi (2020) research that, "the greater the use of e-learning materials and tools within educational context, the higher the efficiency of teaching practices," which aligns to the findings of this study that a lecturer's competence could increase with their increase in teaching experience via e-learning platforms.

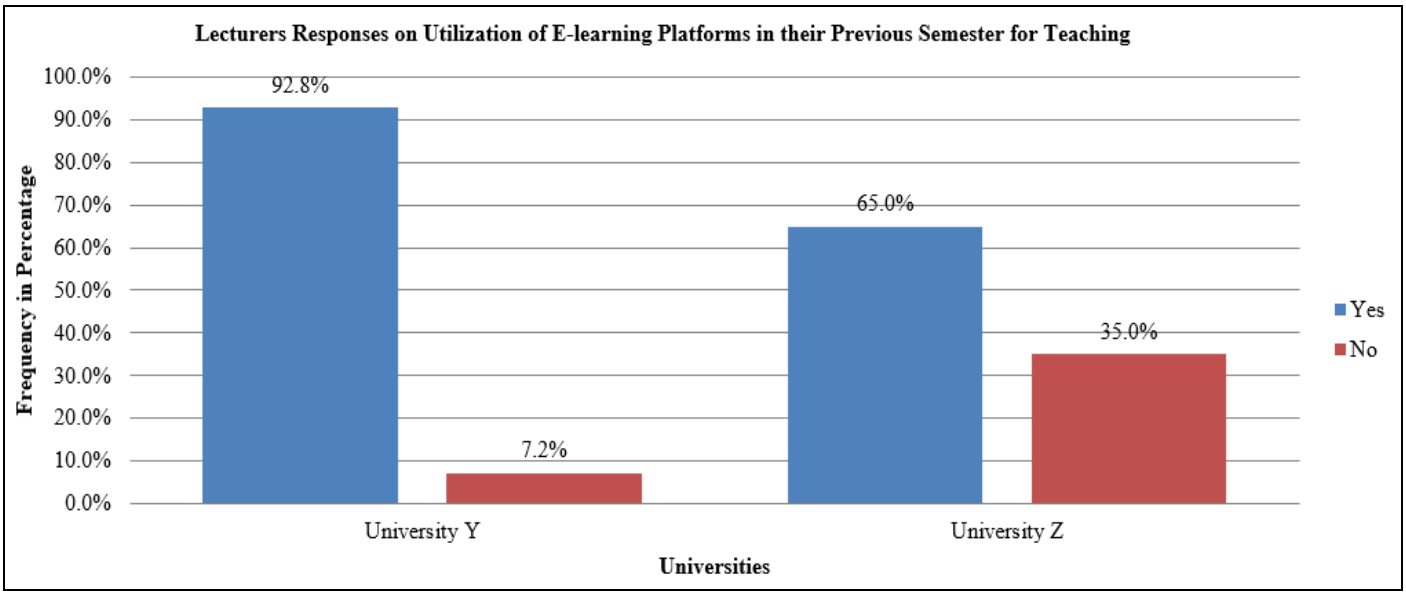

Fig 3 Lecturers Responses on Utilization of E-learning Platforms in their Previous Semester for Teaching
Source: Kimutai, Wawire and Gathara, (2025)

Figure 3 illustrated that majority of the lecturers 92.8% in University Y utilized e-learning platforms for teaching in their previous semester while 7.2% did not. In University Z, the finding showed majority of the lecturers 65.0% as well utilized e-learning platforms while 35.0% did not. This could mean teaching through e-learning platforms could be advantageous for majority of the lecturers since e-learning platforms can provide some sense of flexibility, affordability, and it can be accessed from nearly everywhere and at any time.

➢ *In Connection to this, One Dean of School Noted:*

In this digital era, we actually encourage our lecturers to embrace use of technology in teaching, it is something that we can do with, actually Covid-19 period was a difficult moment but we were able and we are still able to teach online, (Male Dean of School B, University Y September, 2023).

➢ *Another Dean of School Added:*

E-learning is being used in the school of health sciences especially in public health, and also few areas in medicine and pharmacy and nursing. Basically, we developed platform for e-learning, a very good one during Covid-19, so that one helped our students to overcome the Covid-19 time. But basically, medicine, nursing, pharmacy, are hands on, a lot of it, you have to actually do experiments and treat and have patients on-site. So e-learning becomes sort of supportive, but not crucial, we tend to go for it, especially during emergencies, but the normal time, we prefer face to face teaching, (Male Dean of School C, University Y November, 2023).

➢ *An Acting Dean of School Reported:*

E-learning has been there in our school and we used it for posting our lecture notes, assignments and to check attendance of students but come covid-19 time is when we shifted so much to teaching through e-learning platforms with innovations of Zoom, Google Meet and others. Before Covid-19, I think most of the lecturers were not serious about online and e-learning platforms as compared to today. The uptake has been positive, there is a high utilization of e-learning platforms, initially people could ask how do you teach for example Mathematics online or through e-learning platforms but we have been able to do it, it has worked and it is working out well with improvement in technology, (Male Acting Dean of School H, University Z, June, 2024).

On the other hand, a small percentage of lecturers did not conduct their teaching through e-learning platforms and this study sought to understand why they did not utilize the

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platforms. In connection to this, a male deputy dean of school admitted:

We have not really fully integrated or adopted e-learning to a higher degree in the delivery of our lectures in our school. This is because most of our programs are hands on and field based, and for that reason, we have not yet moved into the area of e-learning. However, during the Covid-19 period, we made a lot of effort in trying to integrate e-learning and quite a good number of lecturers developed e-learning modules, and we even tried to benchmark with similar universities across the world but we did not complete the process because of external factors, whereas we think it could be possible with the right technology and training, we have still not yet been able to adopt it, (Male Deputy Dean of School D, University Y, November, 2023).

- *Further, in Science Related Courses, a Dean of School Reiterated:*

Science courses require a lot of illustration, demonstration and we have been trying to adapt to see whether we can get some virtual labs, where we can be able to demonstrate some of the experiment virtually. We have not been able to adapt that very well, but we have a few courses that have been adapted where we are supported, but in purely hands-on sciences we have not, (Male Dean of School F, University Y, December, 2023).

- *Another Dean of School had this to say:*

Conservatism is a major problem, and resistance, there is some resistance to new ways of learning. Some of them find it difficult even focusing on the computers because of age and sometimes health related issues such as pain in the eyes while some don't want to renew themselves or renew their old ways; for example, those lecturers with very old notes which have turned yellow in color, for them they are probably not reading the new materials to update their teaching materials and it is a sign of not wanting to embrace e-learning, (Male Dean of School A, University Y, September, 2023).

- *The Head of ICT Further Argued:*

New generation lecturers use e-learning platforms, so I think it's more to do with culture and what's embedded in the mind-set of lecturers because our older lecturers who teach science courses teach through e-learning platforms but our old lectures who teach Arts related courses are still resistant, even the newer ones in some art courses are sometimes resistant to teach through the platforms. I would have said age, but no, we have old lecturers who really embrace it. Age may look like an issue but it can be handled, for many of them it is more of the mind-set, (Male Head of ICT, University Z, June, 2024).

In summary of the deans' and head of ICT; non-utilization signalled inadequacy in development of e-learning in some courses such as engineering, architecture, and practical-based sciences. Additionally, personal related challenges such as subject- specific, conservatism, health related issue, culture and mind-set of the lecturers could explain why some did not instruct via e-learning platforms.

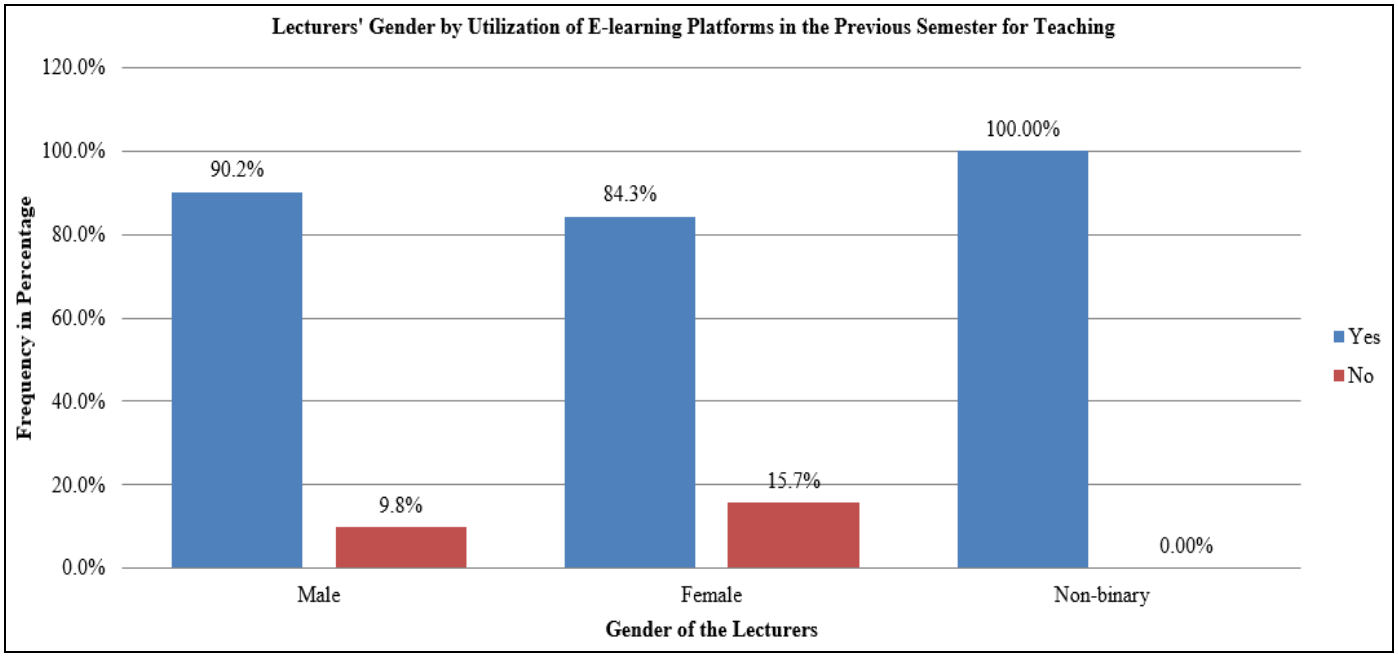

Fig 4 Lecturers Gender by Utilization of E-Learning Platforms for Teaching
Source: Kimutai, Wawire and Gathara (2025)

Figure 4 showed that majority of male gender lecturers 90.2% utilized e-learning platforms for teaching while 9.8% did not. A larger percentage 84.3% on female gender lecturers utilized e-learning platforms for teaching while 15.7% did not. All the lecturers who reported non-binary gender (100%) utilized e-learning platforms for teaching. Gender-wise, majority of all the genders presented utilized e-learning platforms in their previous semester for teaching at their respective universities.

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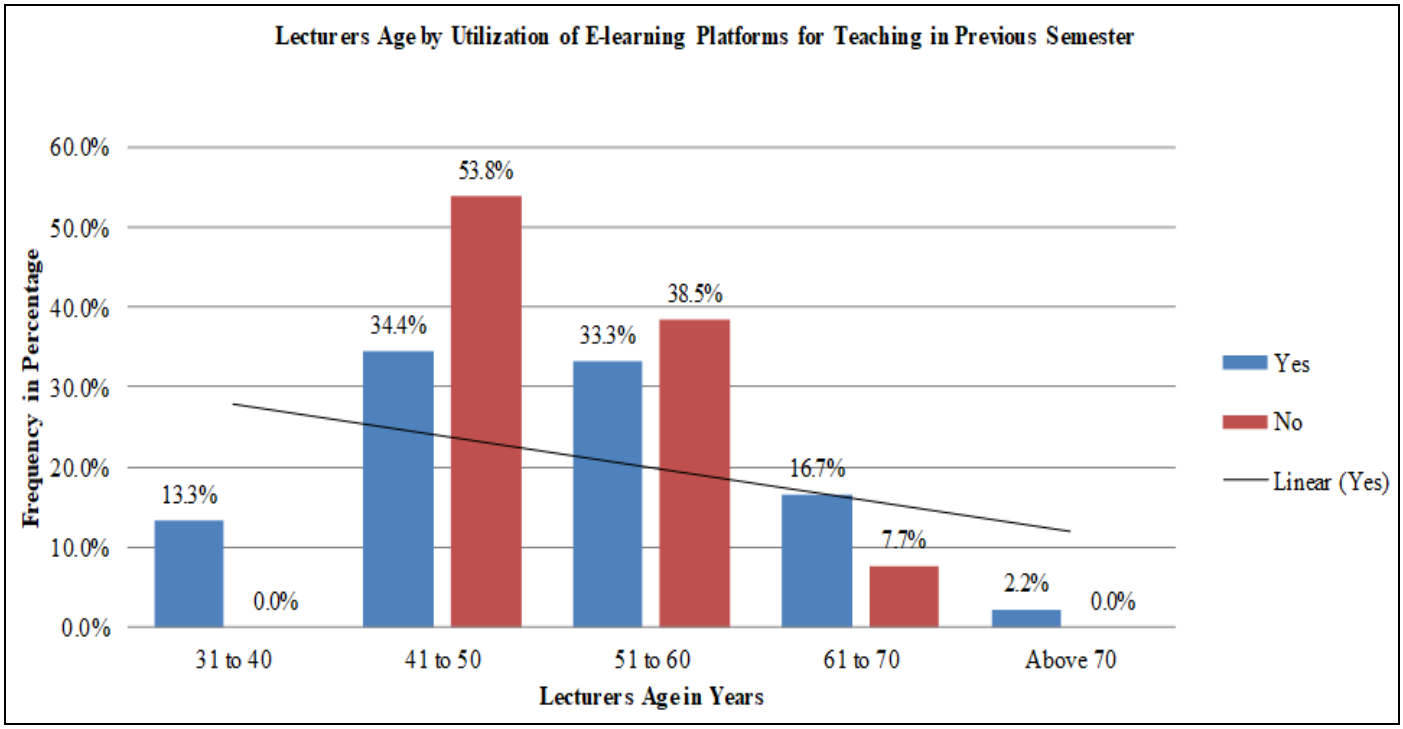

Fig 5 Lecturers Age by Utilization of E-learning Platforms in the Previous Semester for Teaching
Source: Kimutai, Wawire and Gathara, (2025)

Figure 5 showed 13.3% of lecturers aged between 31 to 40 years utilized e-learning platforms for teaching while 0.0% did not. Majority of lecturers aged between 41 to 50 years (53.8%) did not utilize e-learning platforms for teaching while 34.4% utilized. Additionally, lecturers aged 51 to 60 years (38.5%) did not utilize e-learning platforms in their previous semester for teaching while 33.3% utilized. Lecturers aged between 61 and 70 (16.7%) utilized e-learning platforms for teaching while 7.7 % did not. Lastly, lecturers aged 70 and above (2.2%) utilized e-learning platforms in their previous semester for teaching while 0.0% did not. From the analysis of the data in figure 5, a linear trend line was established to understand the trend in age and utilization of e-learning platforms for teaching among university lecturers. The linear trend-line was established on lecturers who utilized e-learning platforms for teaching and showed that younger lecturers appeared to utilize e-learning platforms for teaching when compared to older lecturers.

➢ *In this Connection, One Dean of School Argued:*

Our youthful staffs are able to adapt very quickly to new modes of communication. And therefore, because of their very nature of adaptability they are able to embrace e-learning compared to older staff, who are fairly conservative, and they find teaching through the computer as extra work to them, but having said that I don't rule out the fact that there are older lecturers who embrace teaching through e-learning platforms; the older ones who have been trained, because we have had sessions of training, they find teaching through e-learning platforms very flexible, (Male Dean of School A, University Y, 2023).

➢ *Another Dean Noted:*

Older medical teaching staffs are not very conversant with computer technology, this can be an issue but younger medical lecturers, most of them are computer savvy. E-learning is being introduced slowly into medicine and our lecturers are experiencing new innovation, new technology and doctors are changing, I don't think people are against e-learning, in fact, in some areas, it could be very useful, especially in places where there is infectious diseases and don't have to expose everybody to the site, (Male Dean of School C, University Y, 2023).

➢ *Another Dean of School Observed:*

It depends on one's preparedness or one's years in service. You find some of us who are old and have been long in the service, we are about to retire using the technology is a challenge. There are some who are shy to want to learn for fear that probably they would be laughed at, or they will be ridiculed. But some are willing to learn despite being old they want to learn something new, they take their time, they struggle and step by step they pick up and integrate technology in their teaching, (Male Dean of School B, University Y, September, 2023).

The study also sought to find out the trend on what motivated the lecturers to teach through e-learning platforms in universities and the findings were presented in figure 6.

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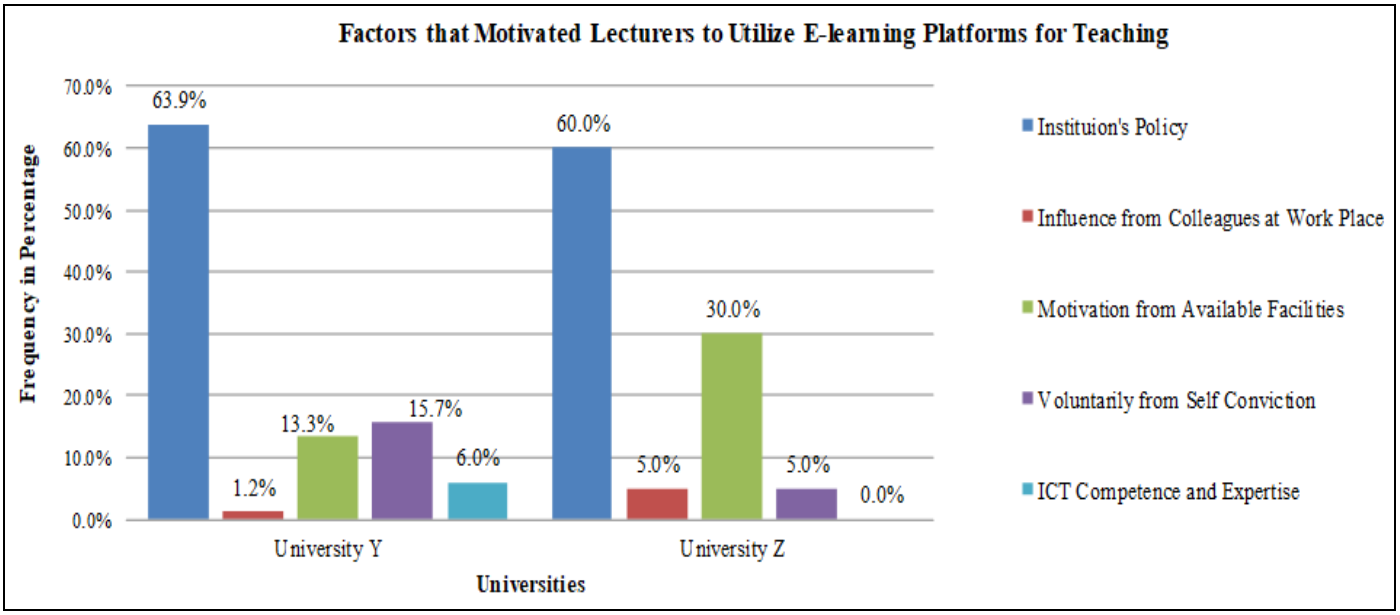

Fig 6 Factors that Motivated Lecturers to Utilize E-learning Platforms for Teaching
Source: Kimutai, Wawire and Gathara, (2025)

Figure 6 illustrated a majority 63.9% of lecturers in University Y reported their institution's policy as the motivating factor while 15.7% reported voluntarily from self-conviction, 13.3% reported motivation from available facilities, 6.0% reported ICT competence and expertise and 1.2% reported influence from colleagues at work place. In university Z, majority of the lecturers 60.0% as well reported institution's policy, 30.0% reported motivation from available facilities, 5.0% reported voluntarily from self-conviction and another 5.0% reported influence from colleagues at work place.

➢ *In this Connection a Dean of School Claimed:*

The university policy is that we embrace technology and management is trying very much to ensure that programs in the university embrace the use of technology. It is very clear, we are aware of it, and indeed being in the digital era, both students and the lecturers are expected to embrace the use of technology in whole manner, for example, a lecturer has two contact hours with our students for a physical lecture and at least one hour for online interaction in a unit, (Male Dean of School B, University Y, September, 2023).

In connection to the factors that motivated lecturers to teach through e-learning platforms, the head of ICT stated:

It is now part of the performance evaluations and the other thing it's easy to switch over to the next semester, you just get your old content, change a few things and move over. Again, it is easy to mark online exams, CATs and assignments, once the exam is done, the system marks it for the lecturers with AI and the new algorithms set. There is also the fact that if you don't utilize online teaching and learning platforms according to our standards a lecturer's performance will be down so we are actually encouraging them to use e-learning and many of them are now embracing it on their own, (Male Head of ICT, University Z, June, 2024).

➢ *A Dean of School Emphasized:*

One can teach from anywhere, so long as you have Wi-Fi or you have bundles, because of the flexibility it becomes very easy to handle. It is also convenient in the sense that it's hard to miss a class, you could be in your house, and you don't have to go to a special place to teach, the classroom is now everywhere; you can sit under a tree or in your study room and teach. Lecturers can self-evaluate themselves, because most of the discussions are recorded, the gadgets record them, and you can hear and evaluate yourself, (Male Dean of School A, University Y, September, 2023).

➢ *An Acting Dean of School Added:*

Lecturers found it as flexible, and the attitude changed. I think also the other thing is that lecturers find it to be easier, because you don't need to struggle very much to come here and prepare. For example, this week, there was a conference here [pointing at the lecture halls] and all the lectures; the morning, mid-morning, afternoon and evening lectures, were all converted to online. The lecturers and students were not coming for physical classes here because the lecture halls were in use Monday to Friday, (Male Acting Dean of School H, June, 2024).

On the other hand, the teaching staff in technical courses like engineering and architecture did not utilize e-learning platforms in their previous semester in teaching their courses. The researcher was interested to know what could be the possible motivators for the teaching staff to adopt e-learning in programs like engineering and architecture and the deputy dean of school implied:

There is need for comprehensive training to the faculty and transformation of programs to the extent that is possible to do it online. The equipment and software used in these technical courses are expensive both in acquiring them and buying, (Male Deputy Dean of School D, University Y November, 2023).

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➢ *Mode of Teaching Utilized by Lecturers when Teaching through E-learning Platforms*

The study was interested on the modes utilized by lecturers in teaching through e-learning platforms in the universities. The modes are very important to this study because it shows what lecturers prefer and what they can afford. Blended mode requires both digital and physical ICT resources, purely offline mode focuses on traditional teaching aids while purely online depends entirely on ICT tools and platforms, the findings were presented a figure 7.

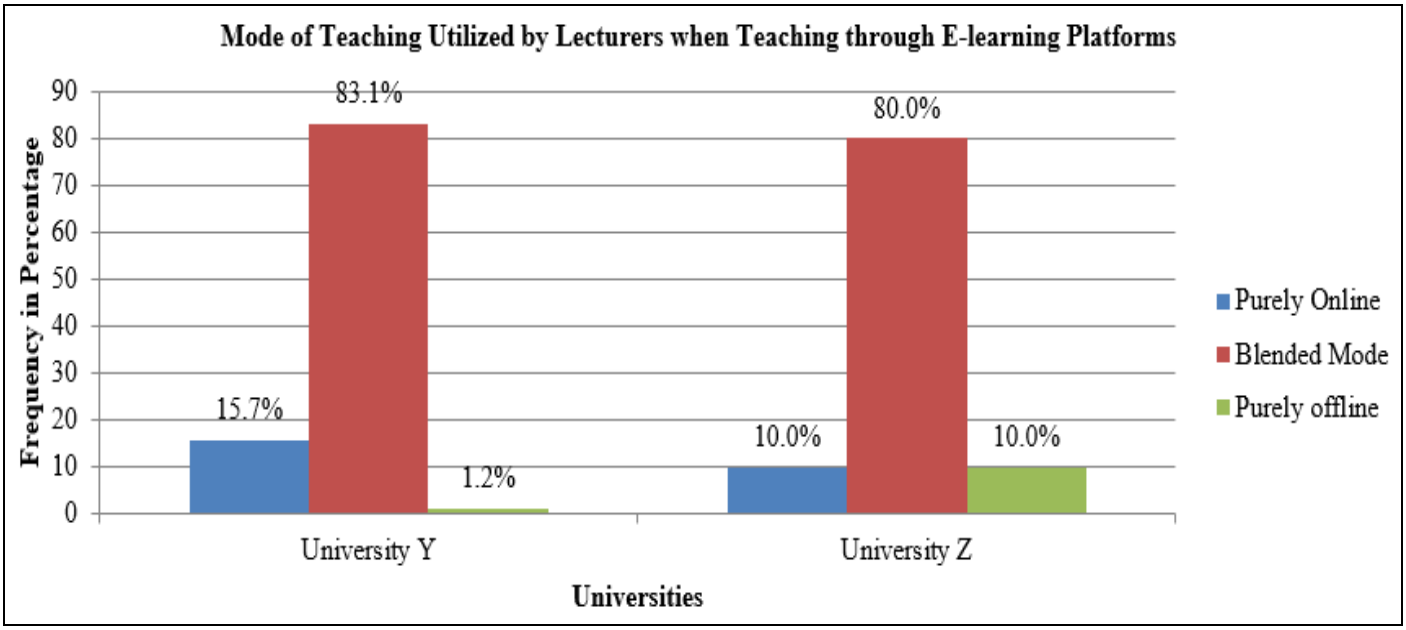

Fig 7 Mode of Teaching Utilized by Lecturers when Teaching through E-learning Platforms
Source: Kimutai, Wawire and Gathara, (2025)

Figure 7 illustrated a majority of lecturers 83.1% in University Y utilized blended mode, 15.7% utilized purely online mode and 1.2% utilized purely offline mode. In University Z as well a larger percentage of lecturers 80.0% utilized blended mode, 10.0% utilized purely online and another 10.0% utilized purely offline mode. Blended mode appeared to suit most university lecturers because one can combine both online and offline modes and when one fails say online fails the remedy could be offline and vice versa, furthermore blended mode aligns with global trends.

➢ *A Representative of the Dean in Digital School Added:*

Mainly we are not doing pure online, what we have is blended teaching. The pattern has changed it was physical then it came to virtual, it actually went 100% virtual, but now we reduced it to blended, and meet with students physically for 2 hours, and then 1 hour virtually, (Male Representative of Dean Digital School, University Y, December 2023).

In connection to the preference of lecturers to teach either physical or online, a female deputy dean of school responded in two perspectives:

One; most of our lecturers would prefer online because they can comfortably do it from their office or home. Although there are units then that are not easy to deliver online, unless you're well equipped with gadgets that will help you, then you may realize you are not achieving much with the online teaching, it requires a little bit of investment. Two; the concentration, the participation of the students; as a lecturer I could log on, and so many of my students are logged on, many are logged on but they are not with you, especially in the evening classes, sometimes they are even engaged in other activities other than the online class, it is challenging because you cannot tell even if you call out names some who are keen will respond but those engaging in other activities never respond at all, (Female Deputy Dean of School E, University Y, November, 2023).

➢ *Methods that Lecturers Used while Instructing Through E-learning Platforms*

To further understand how lecturers utilized e-learning platforms for teaching the study was interested to know the methods that lecturers used instructing via e-learning platforms. Sometimes video instruction can be more successful or effective than audio lectures, it can improve concentration because of the visual cues when compared to an audio only lecture. On the other hand audio lectures can be used on bandwidths that are low compared to video lectures. The data obtained were analysed and presented in figure 8.

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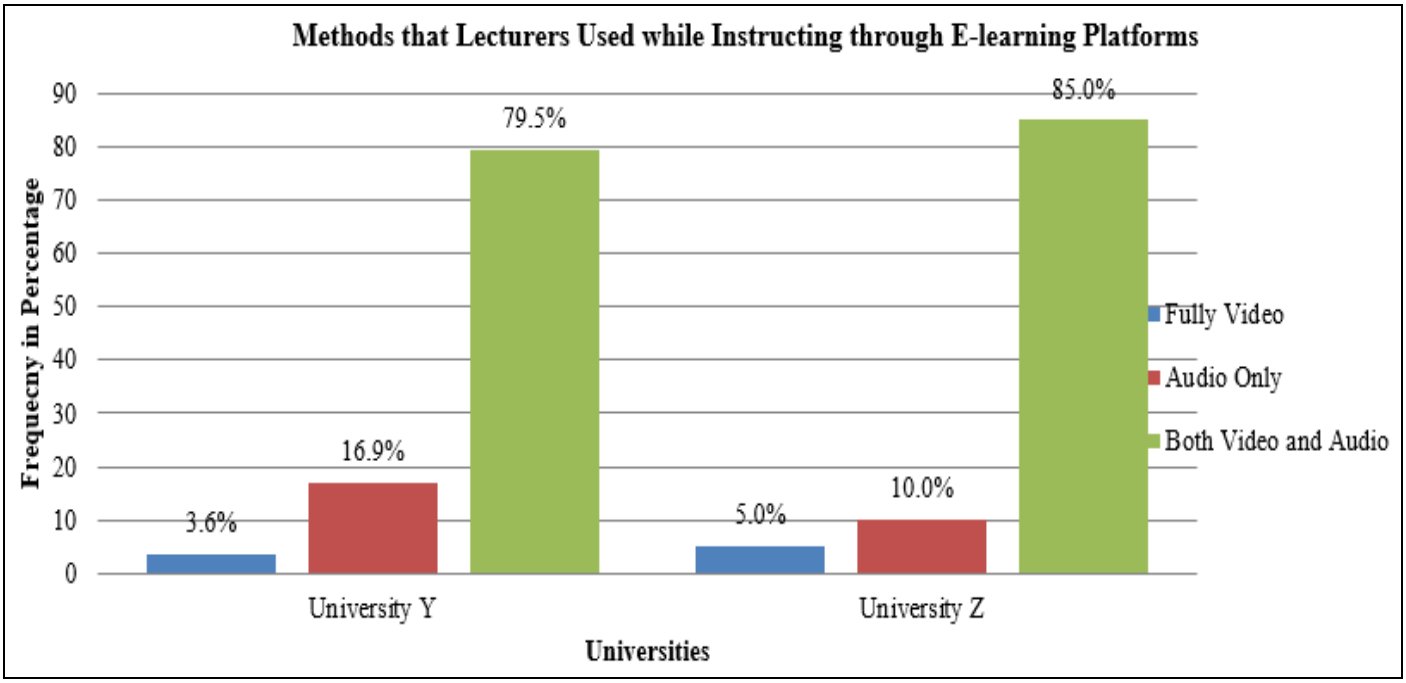

Fig 8 Methods that Lecturers Used while Instructing Through E-learning Platforms
Source: Kimutai, Wawire and Gathara, (2025)

Figure 8 showed a bigger percentage 79.5% of lecturers in University Y utilized a mixture of video and audio in their teaching through e-learning platforms, 16.9% utilized audio only and 3.6% utilized fully video. In university Z, 85.0% of lecturers utilized a mixture of video and audio, 10.0% utilized audio only and 5.0% utilized fully video. Using both video and audio could bring a balanced approach while instructing through the e-learning platforms.

This finding on lecturers incorporating audio-visual in teaching was supported by Bates (2020) study on the "Trends in the Use of Audio-visual Media in Distance Education System," which highlighted an increase in utilization of audio-visual in distance education as educators move away from the traditional broadcasting.

- *In this Connection One Dean of School Explained:*

I started with Google Classroom, which I still like, because it's simpler to use. Then I was trained on Moodle as well, and I was also trained on Blackboard Ultra, I think I enjoy Blackboard Ultra the most, it is interactive, self – learning, and not very complicated. I can log on to the Zoom while on Blackboard Ultra I can do a lot of things. I can connect to YouTube, which is part of it. And I think it's a very brilliant system as compared to Moodle, Moodle slightly sometimes when you're trying to upload some materials, external materials, and it does not give you that privilege like YouTube videos. This is the Gen Z, they use social platforms like YouTube, and that is the best way we could introduce an interactive method of learning, (Female Dean of School G, University Z, May, 2024).

- *Another Dean Stated:*

E-learning for me saves time, space and gives opportunity for many to learn in different localities. It has created many ways of interactions unlike when I did my first e-learning about 15years ago through the Blackboard Learn; it was difficult because electricity would go off during the teaching process and everything stops, but now things have improved, there is internet, improve electricity connections and new digital devices and innovations in video conferencing and virtual reality labs, portable computers, tablets and smart phones, and you can now teach from anywhere, and at any time, (Male Dean of School C, University Y, November, 2023).

- *Lecturers Sources of Internet for Teaching through E-learning Platforms*

The research was interested to establish a trend on lecturers' sources of internet when teaching through e-learning platforms. Understanding lecturers' source of internet connectivity provides information on how they are connected, how effective or reliable and comfortable one can be when instructing through e-learning platforms. The data analyzed was presented in figure 9.

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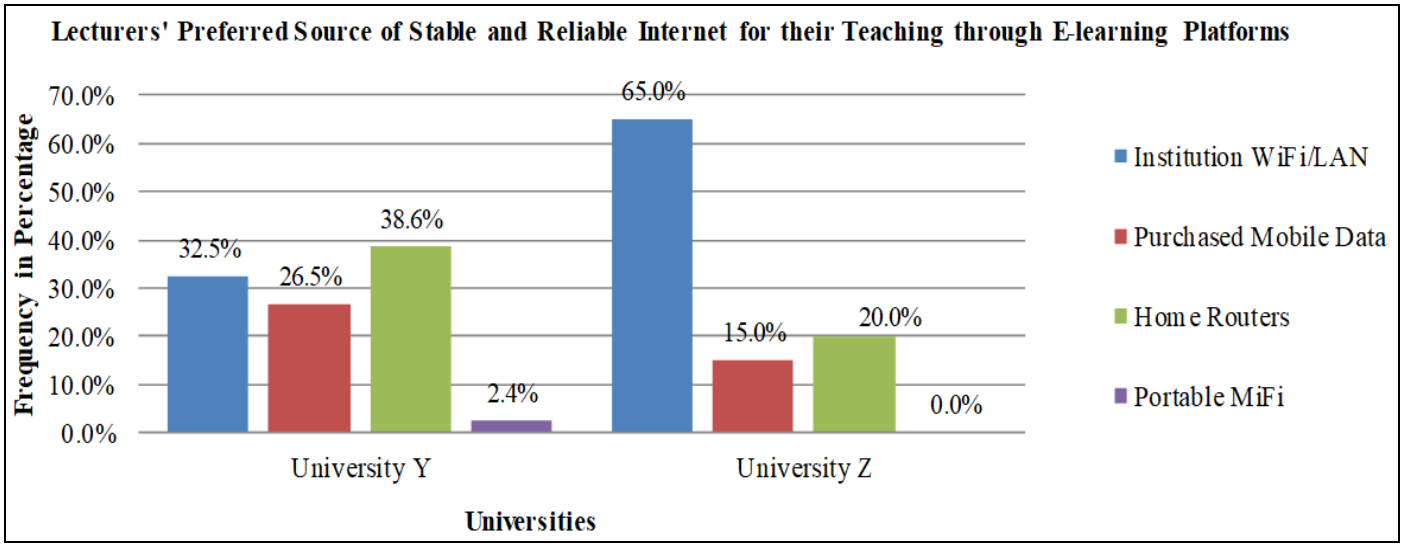

Fig 9 Lecturers' Preferred Source of Stable and Reliable Internet for their Teaching Through E-learning Platforms
Source: Kimutai, Wawire and Gathara, (2025)

From figure 9, a larger percentage 38.6% of lecturers in University Y reported home routers as their source of internet connection, 32.5% reported institution's Wi Fi/LAN, 26.5% purchased mobile data and 2.4% reported portable Mi-Fi. In University Z, a larger percentage 65.0% reported institution's Wi Fi/LAN, 20.0% reported home routers and 15.0% purchased mobile data. The findings showed that different internet sources provided different levels of speed and reliability and this might impact a lecturer's quality of teaching through-learning platforms.

➢ *In Connection to the Source of Internet, a Dean of School Acknowledged:*

In developed countries, the university purchases the time and then wherever I am, I have access to the internet, like from home I only sit there and get into my email, and then I am enabled. But here in Kenya, our lecturers are purchasing the internet some people go for bundles others go for home routers. The Zuku internet, for example, has become very expensive; it is about 6000 Kenyan shillings per month. If the universities can negotiate this and get it, and then we have access, it becomes easier. For example in America, we don't have to compare ourselves with America, but if we aspire to, we can do better than America, a State pays for internet; like, for example, a State here can be Nairobi City County, they purchase internet, and the hours or the time, (Male Dean of School B, University Y, September, 2023).

➢ *Lecturers Average Daily Use of Internet for Teaching through E-learning Platforms*

The study was also interested to find out lecturers average daily use of the internet in teaching through e-learning platforms. A lecturers' daily use of internet can reflect the extent to which he/she is engaged with e-learning platforms, a frequent use may suggest effective use while limited use of internet for teaching may point out resistance or challenges using the internet to teach through e-learning platform. The findings were presented in figure 10.

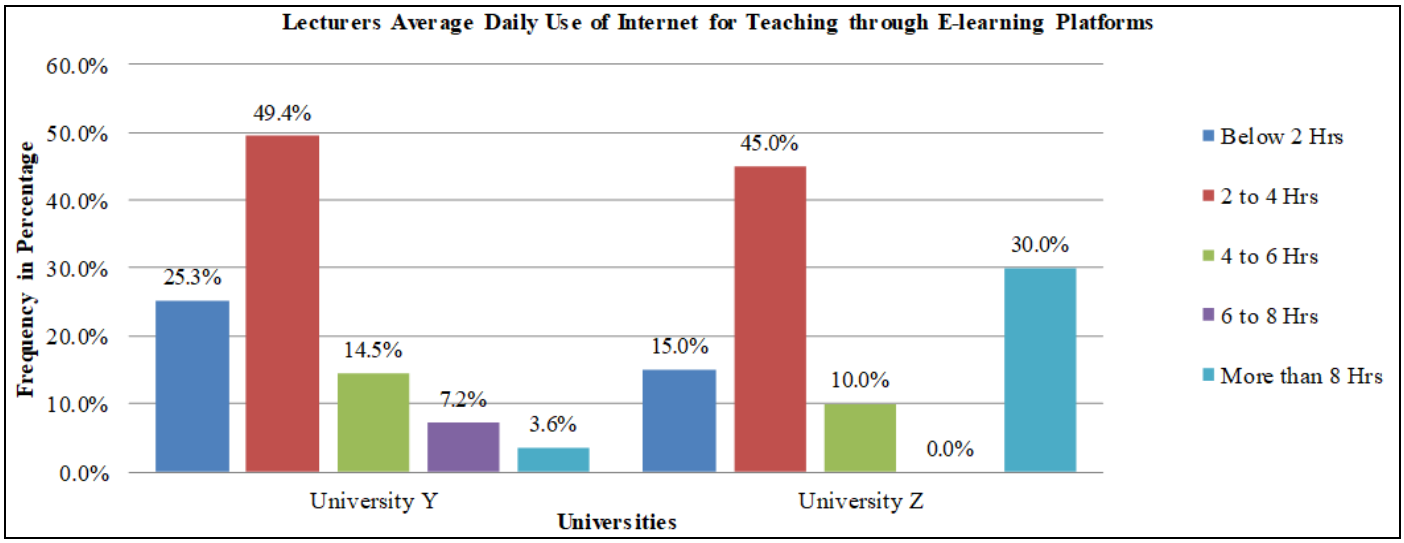

Fig 10 Lecturers Average Daily Use of Internet for Teaching Through E-learning Platforms
Source: Kimutai, Wawire and Gathara, (2025)

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In figure 10, a larger percentage of lecturers in University Y (49.4%) and University Z (45.0%) reported 2 to 4 hours average daily usage of the internet. The other lecturers in University Y who reported an average daily use of below 2 hours were 25.3%, those who reported an average daily use of 4 to 6 hours were 14.5%, lecturers whose average was 6 to 8 hours were 7.2% and those who reported more than 8 hours were 3.6%. In University Z, lecturers who reported an average daily use of below 2 hours were 15.0%, those who reported an average daily use of 4 to 6 hours were 10.0%, 0.0% reported 6 to 8 hours and 30.0% reported more than 8 hours. Majority of the lecturers reported an average of 2 to 4 hours which reflected an optimal engagement and use of internet for teaching. Low utilization would imply challenges or resistance while excessive time spent on internet for teaching would imply inefficiencies in using digital platforms.

To further establish trends in e-learning utilization for teaching, lecturers were further asked their preferred lecture duration for teaching through e-learning platforms as presented in figure 11.

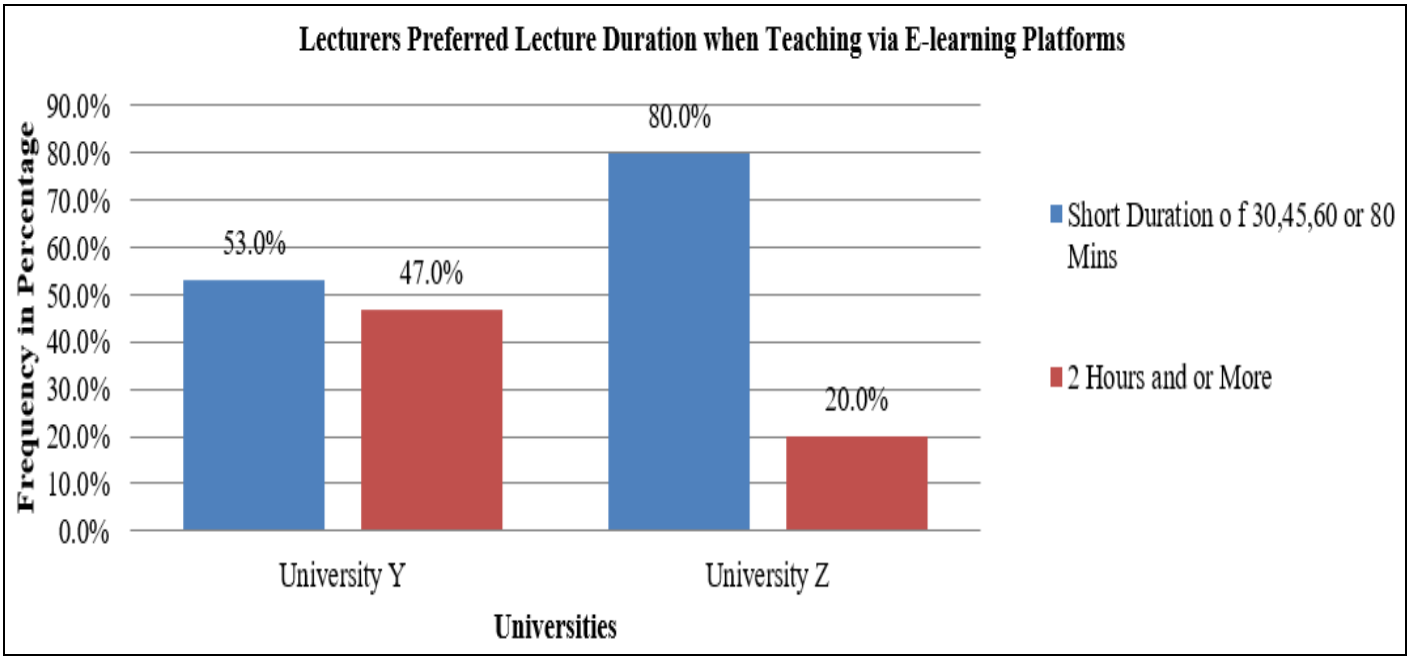

Fig 11 Lecturers Preferred Lecture Duration when Teaching Via E-learning Platforms
Source: Kimutai, Wawire and Gathara, (2025)

Figure 11 illustrated more than half of the lecturers 53.0% in University Y preferred to teach in short lecture durations of 30, 45, 60 or 80 minutes while 47.0% preferred to teach in long lecture durations of 2 hours and or more. In University Z, a larger percentage of lecturers 80.0% preferred to teach in short lecture durations of 30, 45, 60 or 80 minutes while 20.0% preferred to teach in long lecture durations of 2 hours and or more.

When lecturers were further asked to provide reasons as to why they preferred short duration of 30, 45, 60 or 80 minutes about half of the lecturers acknowledged "concentration span," the other lecturers cited "it is the allocated time for an online lesson by the university" "internet costs are affordable for short lecture duration" "to avoid fatigue and lack of interest" "it is the university policy on unit scheduling" and other few cited "it encourages learner-centered approach."

On the other hand a smaller percentage of lecturers who preferred to teach in long lecture durations of 2 hours and or more gave their reasons as "long durations allow for discussions" "long lecture duration allows question and answer hence feedback" "it gives adequate time to cover wide topic areas" "long lectures gives enough time to compensate internet fluctuation" and "I teach postgraduate students and they prefer long durations for wide coverage of topic areas."

The study sought to further find out lecturers' preferred place to conduct a class when teaching through e-learning platforms. One's location, environment or personal factors could influence teaching quality or ability to teach effectively. Again different locations offer different level of technical support and may highlight constraints faced by lecturers. An off-campus preference may insinuate efforts to minimize distractions while on-campus may imply good infrastructure or resources. The findings were presented in figure 12.

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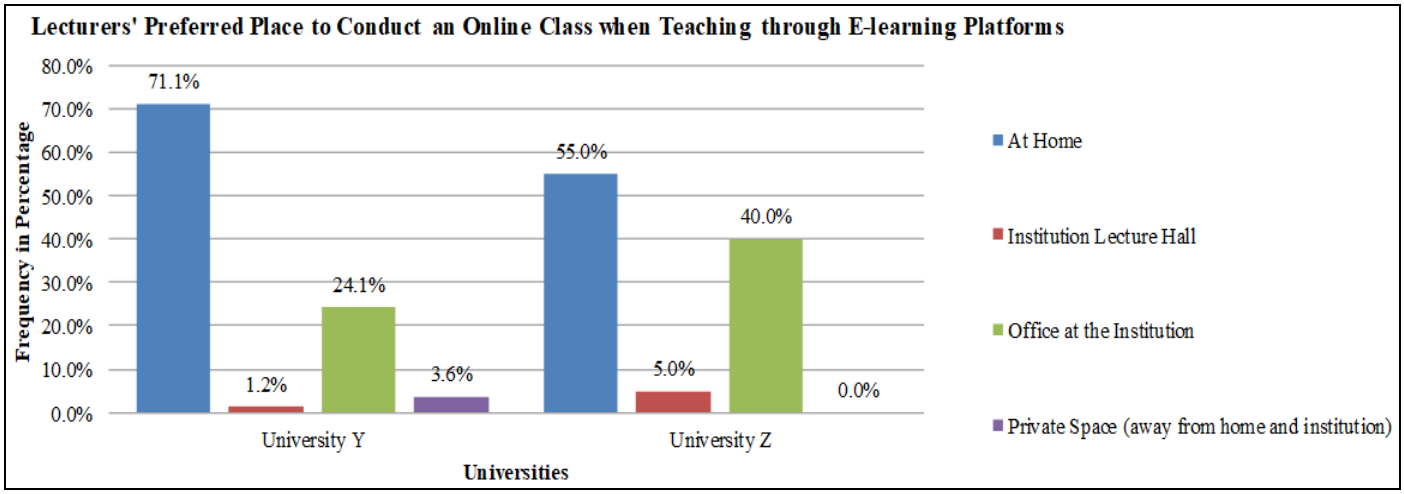

Fig 12 Lecturers' Preferred Place to Conduct an Online Class when Teaching Through E-learning Platforms
Source: Kimutai, Wawire and Gathara, (2025)

In figure 12 a larger percentage 71.1% of lecturers in University Y preferred to conduct an online class at their homes, 1.2% preferred institution lecture hall, 24.1% preferred their offices at the institution and 3.6% preferred a private space. In university Z, more than half of the lecturers 55.0% preferred their homes, 5.0% preferred institution lecture hall, and 40.0% preferred their offices at the institution. In both universities more than half of the lecturers preferred their homes for an online class.

When lecturers were further asked to provide reasons for their choices, a few lecturers who picked on their offices in the institution cited "presence of standby generator in cases of electricity blackouts" while others asserted that "the institution had reliable internet connectivity" with a majority pointing out "conducive environment for teaching".

On the other hand, majority of the lecturers who chose home as their preferred place cited "convenience, stable internet and privacy" "quiet, private with minimal disturbance" "efficient, reliable and faster internet speed" "little disturbance" "offices at the institution are shared" "the internet in the institution is not reliable" "offices in the institution are not enabled for teaching" "home is more convenient for evening and weekend classes" "there are no sound proof equipment in the offices and when one lecturer is teaching in an adjacent office it inconveniences another lecturer teaching next door" and.

- *One of the Lecturers Reported One of his Reasons as:*

Offices in the institution are closed by 5:00 PM and evening classes start as early as 5:30 PM and some extend to 9:30 PM and staying in the office at the institution till that late inconveniences not only a lecturer but caretakers and technical staff.

Sound proof equipment minimizes distractions from the surrounding environment and from adjacent office distractions from interfering with online lectures. A noise-free background without echoes improves the quality and clarity of virtual lectures. Lecturers were asked to indicate whether their offices in the institution had soundproof equipment and the findings were presented in figure 13.

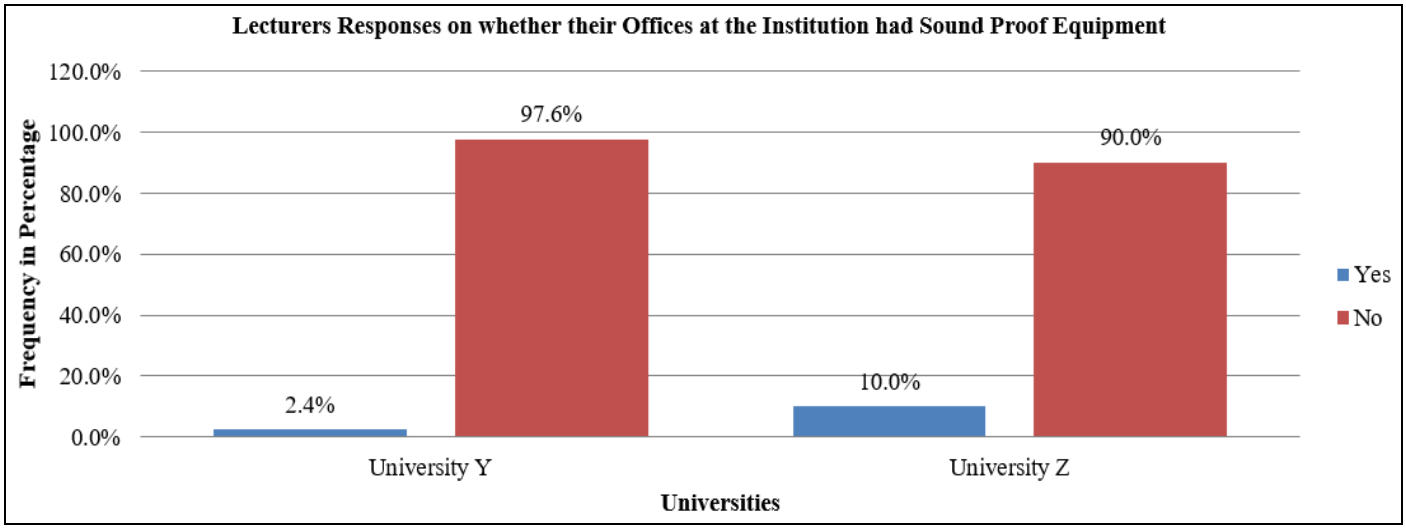

Fig 13 Lecturers Responses on Whether their Offices at the Institution had Sound Proof Equipment
Source: Kimutai, Wawire and Gathara, (2025)

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In figure 13, a larger percentage of lecturers (97.6%) in University Y and (90.0%) in University Z reported that their offices in the institution had no sound proof equipment while 2.4% in University Y and 10.0% in University Z reported presence of sound proof equipment. The lack of sound proof equipment may impact on the quality of teaching in the office through e-learning platforms. Lecturers require high-quality audio and minimal disruptions for effective virtual teaching via these platforms.

- *In this Connection a Dean of School Reported:*

Most lecturers don't like carrying their laptops around to come and connect to the e-learning platforms from the offices because the offices are not enabled, there are no sound proof equipment, offices are shared among lecturers, generally most offices are designed for administration purposes and are not enabled for teaching, (Male Dean of School B, University Y, September, 2023).

In connection to the trends in e-learning utilization for teaching among university lecturers, one dean of school noted:

In 2003 there was a program called Open Learning (OL); it had modules written and printed. Then gradually, we began teaching through the Computer Assisted Instruction (CAI). Currently, we use Moodle because it is an open source LMS and being a public university sometimes with financial challenges, it becomes expensive to subscribe to Blackboard. E-learning is changing by day, it is evolving for the better, and it is not just in the classroom but also the way we do our seminars or conferences; students from other continents are presenting their papers virtually, (Male Dean of School A, University Y, September, 2023).

- *Additionally, the Head of ICT Expressed:*

We started our e-learning here with Web CT in 2006 then Blackboard bought it in 2010 and around 2012 we made it mandatory for all faculties. The uptake of faculty initially when it was Web CT; only the savvy faculty would use it but when we moved to Blackboard we did some training courses with faculty trying to integrate them to e-learning but there was some resistance. It was taken up gradually and now it's being used very widely apart from a few lectures. We are using Blackboard Learn as our LMS here because at the time we were shifting to e-learning, Moodle didn't have local vendors and Moodle is an open source but we are slowly considering Moodle just because of cost. The trend of e-learning has really evolved we are now moving to online exams, and online teaching; faculty are now for the last two years embracing it more and more, and with Blackboard Ultra, which has AI [Artificial Intelligence] it has the self-marking exams and algorithms to even solve Mathematical problems, it makes their work easier, (Male Head of ICT, University Z, June, 2024).

- *Another Dean Highlighted:*

If you ask me on the trend, I will say we have not taken off. We are just there, if it's on a scale of 1 to 10, perhaps we are even less than 5 yes, so it's a challenge, and that is what is affecting us very much on how much we can use the technology. But even those who are eager to, as I've said, the other compounding factors, you find these technologies are not readily available to match the numbers. Say, like in the school, you are in a department, you find you are 30 lecturers, but the resources that are there for you to use are not even enough for two or three lecturers to use. So even if we were enthusiastic in integrating the technology, you find that we are limited in the type of technologies available for use, (Male Dean of School B, University Y September, 2023).

The finding from the analysis of the in-person interview showed that e-learning was a concept in evolution, a finding supported by Aparicio et al. (2013) study.

V. CONCLUSION

It emerged all the selected universities utilized e-learning platforms; University Y utilized Moodle LMS (open-source) while University Z utilized Blackboard Learn (commercial) which reflects a broader and accelerating trend in higher education globally. Each institution uses a different LMS depending on needs, resources and preferences. This variation is common: some institutions favour open-source solutions to reduce costs; others opt for commercial vendors. When well used, it can enhance transparency, consistency across courses, fairness and streamlined course planning. In both universities no lecturer reported a low level of ICT competence from the self-report tests of ICT competence. At least in the studied universities self-report that they have adequate (not low) ICT competence; it implies that lecturers in the university feel confident about their ability to use information and communication technologies which is a foundational requirement for effective utilization of e-learning platforms and are more likely to adopt digital tools in teaching. With ICT-competent lecturers, universities can confidently implement online learner-centred approaches accommodating working students, part-time students, or those in remote areas.

The trend on age of lecturers with high level of ICT competence appeared that younger lecturers had high level of ICT competence compared to older lecturers. Institutions should not assume that all the staff members have equal ICT readiness; there may be age-linked variation. Younger lecturers may readily adopt new methods (online resources, hybrid teaching), while older lecturers might prefer traditional modes creating a generational gap in teaching style. To bridge this gap, institutions could encourage collaborative teaching models pairing younger and older lecturers to co-design courses, and share strengths (digital fluency and pedagogical experience). Over time, as older lecturers retire and younger, ICT-competent staff become majority, universities may naturally shift toward more digital-centric education. But to manage transition well, policy should guide utilization of e-learning platforms in teaching.

Further, more than half of the lecturers in both universities were motivated by institution's policy on e-learning to teach through the platforms resulting to more than

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three quarters of the lecturers utilizing e-learning platforms in their previous semester. High utilization among lecturers suggests that e-learning is not just a supplement, but is becoming a standard mode of course delivery. This normalization means universities can plan curricula, assessments, and academic processes opening opportunities for blended, hybrid, or fully online learning models. A larger percentage of lecturers in University Y preferred home routers as a stable source of reliable internet whereas more than half of the lecturers in University Z preferred their institution's internet. About half of the lecturers in both university Y and Z reported a 2 to 4 hours average daily usage of internet for teaching whereas more than half of the lecturers in both universities Y and Z preferred short lecture duration of 30, 45, 60, or 80 minutes when teaching through e-learning platforms. Given that many lecturers prefer shorter sessions online, universities should consider restructuring courses. Shorter lecture durations encourage designers to rethink pedagogy. Shorter doesn't automatically mean better; if a 30-minute lecture is poorly designed it might still lose student attention. The quality of delivery, clarity, interactivity, engagement remains critical. Again, not all content fits short segments; some complex or highly conceptual topics may need longer sessions for proper explanation, discussion, or live interaction. Breaking these into too-small chunks might fragment learning or make comprehension harder.

It also emerged that more than half of the lecturers in universities Y and Z preferred to teach from home when conducting an online class through e-learning platforms. This signals that lecturers see remote or home-based teaching as acceptable or even preferable under e-learning contexts not just as a temporary fix, but as a viable working mode. The preference likely reflects a mix of perceived benefits such as convenience (no commuting) or flexibility. At the same time, remote teaching can cause stress or workload pressure on lecturers, especially when institutions do not provide strong support. The practice of "teaching from home" appears to have moved from emergency/temporary measures to something many lecturers may accept, even prefer as part of their regular teaching mode. Not all lecturers may have home environments conducive for teaching, with stable internet, quiet space or reliable electricity; this can degrade teaching quality with limitations for practical, lab-based or discussion-intensive courses.

This study has resulted to the main conclusion based on the emerging trends in e-learning utilization by university lectures; lecturers in both public and private universities prefer teaching from home when using e-learning platforms, it is imperative to conclude that universities should invest in remote infrastructure for quality teaching via the platforms when teaching at home or remotely.

RECOMMENDATION

Given the uptake and preference for home-based online teaching among lecturers, institutional policies should recognize remote teaching as legitimate, long term mode of teaching and not just a crisis response mode and define remote teaching norms, provide training for online pedagogy, support ICT infrastructure, ensure quality assurance, and perhaps formalize remote teaching as part of regular workload options. Universities ought to start providing lecturers with free laptops or computers, free internet services or stipends for home-office set-up for remote or home-based teaching; this mobilization of additional resources could improve the quality delivery of teaching and learning done remotely or from homes.

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