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Challenges and Solutions to Using Technology in Teaching and Learning of Christian Religious Studies Education at Ahmadu Bello University and Federal College of Education, Zaria

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Abstract
This qualitative study for in-depth information on the challenges and overcoming the use of information communication technology in teaching and learning of Christian Religious Studies investigated the challenges that Ahmadu Bello University, Zaria, (ABU, Zaria) and Federal College of Education, Zaria,(FCE, Zaria) teachers and students face in implementing Information and Communication Technology (ICT) in the teaching and learning of Christian Religious Studies (CRS). The objectives were to: identify the types of ICT being used; examine school management support; investigate the challenges faced; and find out the overcoming strategies in the teaching and learning of Christian Religious Studies. The population consisted of twenty-six teachers and two hundred and eighty-nine students out of which twenty respondents were sampled. From the responses ABU supplied teachers with WI-FI connection in their offices. The older teachers prefer chalk and talk method. The students were also provided WI-FI to login using their assigned surnames and passwords but some lack the technical knowledge of ICT usage, and lack of smart phones. On the other hand, both the teachers and students of FCE had to use the e-library provided by the school management. Those who could afford laptops and smart phones buy Internet browsing data. Consequently, the study recommends that: government should provide adequate fund to the education sector and make strong policies that will enforce proper implementation of ICT in the educational institutions. Similarly, it is also recommended that the management of the school should organise workshops and training programmes for teachers and non-teaching staff in order to make them competent to handle ICT infrastructure and services; teachers should ensure that they are well trained on how to use ICT in teaching and to properly guide the students on lesson delivery for better comprehension. Students should seek basic knowledge of ICTs, familiarise and patronise the available technologies in their schools.

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Introduction

The importance of Information Communication Technology (ICT) cannot be over emphasised. It has created a paradigm shift from a teacher-centered approach to a more student-focused approach where the latter becomes more engaged in the teaching-learning sessions. Saha (2023) affirms that using ICT facilitates collaborative learning and development in this twenty-first century

skills. ICT encourages learners to work cooperatively in pairs or groups. Therefore, using ICT facilities is a *sine qua non* for qualitative instructional service delivery in schools (Onu & Ezhim, 2019). The important role of ICT in instructional services thus implies that they have to be available in the first place before usage! particularly for Christian Religious Studies (CRS) teachers and students of Ahmadu Bello University (ABU), Zaria and Federal College of Education (FCE), Zaria.

Information and communication technology has brought innovation to education and changed teaching and learning procedures. In addition to positioning students on a progressive and advancing trajectory, educators must incorporate ICTs into scholarly activities to ensure that students are adequately prepared for the present challenges. Similarly, Homiakova, Arras, and Kozik (2017) believe that one feature of advancement in education is the use of ICT, which is becoming increasingly important in teaching topics with different main focuses.

Online studies became the only alternative during the COVID-19 pandemic and subsequent lockdown, especially in developing nations like Nigeria. However, according to Atakorah, Honlah, Atta, Frimpong, and Achem (2023), this posed a great challenge as many countries were unaware. This was why Kibirige (2023) declares that ICT has become a necessary tool in education post-COVID-19 pandemic. However, even after the lockdown, integrating ICT into teaching and learning has proven to be an enormous challenge in many developing nations, including Nigeria and Uganda.

Statement of the Problem

Information Communication Technologies encompasses the internet-enabled and mobile devices powered by wireless networks. The list of ICT components is exhaustive and continues to grow. Some components, such as computers and telephones, are said to have existed for decades. Others, such as smartphones, digital televisions, and robots, are said to be more recent entries. These technologies can drastically change the fortune of education in general and individuals in particular, which is ideal and highly commendable.

Despite the worthiness of ICT, the researchers observed enormous challenges associated with it. These challenges include creating new opportunities for crimes such as unauthorised access or hacking, stealing or cyber fraud (419), widespread chaos and panic (rumors), new automation technologies and robots that sometimes displace human workers, limit the face-to-face or social interactions with others, drastic change in how people work (from home), communicate, learn and live. Awati and Pratt (2023) also supported some of these concerns. Unfortunately, many desperate teachers and distracted students have experienced the ugly side or have become victims of ICT manipulations.

Another disheartening and discouraging concern is the prevailing condition in the management of schools in Nigeria. The required infrastructures are scarce and inadequate, and those available are in deplorable conditions. It, therefore, connotes that the country seems to be living in prehistoric times in educational management while even developing countries in Africa, such as South Africa, Kenya, and Tanzania, according to Jimoh (2019), is far ahead of Nigeria in ICT applications. The questions may be: what ICT infrastructures do the two tertiary institutions have, how are they being used, and how do the teachers and students bridge the gap or lacuna created by either inadequate or non-available?

Objectives of Study

The specific objectives of this study were to:

1 Identify the types of ICT that are being used in the teaching and learning of CRS
2 Examine ways the school management supports teachers and students 1 in integrating ICT into the teaching and learning of CRS.
3 Investigate the challenges faced in integrating ICT into the teaching and learning of CRS.
4 Find out how teachers and students overcome the challenges faced in integrating ICT into the teaching and learning of CRS.

Research Questions

The following questions were raised to guide the study

1 What types of ICT are used in CRS teaching and learning?
2 In what ways does the school management support teachers and students in integrating ICT into the teaching and learning of CRS?
3 What obstacles must be overcome to inc orporate ICT into CRS education?
4 How do the teachers and students overcome the challenges faced in integrating ICT into the teaching and learning of CRS?

Conceptual Definitions

First and foremost, it is imperative to briefly explore the definition of ICT. In the words of Saha (2023), ICT can be defined as anything that allows us to get information, communicate with each other, or influence the environment using electronic or digital equipment. UNESCO (2009) expounds that ICT is a diverse set of technological tools and resources used to transmit, store, create, share, or exchange information. These specialised tools and resources include computers, the Internet (websites, blogs, and emails), live broadcasting technologies (radio, television, and webcasting), recorded broadcasting technologies (podcasting, audio and video players, and storage devices) and telephony (fixed or mobile, satellite, vision /video-conferencing, etc.). Again, UNESCO (2017) states that the most effective policy for integrating ICT into education is through whole school-based planning, teacher training, and professional development. These are the fundamental challenges to the users (in this case, refer to teachers and students). It is not mere resistance to change; it sincerely cannot plan for non-available infrastructure.

Another topical variable that needs definition is Christian Religious Studies (CRS). We (Gana and Ajibola) define Christian Religious Studies as a multi-disciplinary academic field devoted to researching Christian beliefs, behaviours, doctrines, institutions, and practices. It describes, compares, explains, interprets, and portrays all aspects of Christian Religious perspectives. According to Anele (2023), some reasons for the study of CRS include: it enables one to develop a personal relationship with God, acquire basic principles of Christian living, create a sense of self-respect and respect for others, develop positive attitudes and values, which help one to cope with challenges of life; contribute to the moral and spiritual development of students; contribute positively to the transformation of an individual and the society as whole; identify answers to situations of life, including death and eternal life; help learners to determine answers to 'life's questions; promote cultural integration; enable one to acquire a better understanding of God; unite people; guides one in choosing a career; help one to appreciate African religious heritage and

other religions; and promote living values such as honesty concern for others, kindness, love and unity.

Adopted theory

Two theories informed this study both directly and indirectly: the first is the digital divide theory, which was put forth by Drajati, Tan, Haryati, Rochsantiningsih, and Zainnuri (2018) and is known as Technological Pedagogic Content Knowledge, or TPACK (Kormos & Wisdom, 2021). Technology, pedagogy, and content knowledge of teachers are connected through TPACK and should be incorporated into the teaching process (Backfisch, Lachner, Stürmer & Scheiter, 2021; Cheshmehzangi, Zou, Su, & Tang, 2022). TPACK assumes that the instructor should be knowledgeable about what to teach, how to teach it, and how to choose the right technology to assist in delivering lessons. The three interrelated components of the TPACK framework are technological knowledge for efficiency and accessibility, pedagogical knowledge, and content knowledge (Ramorola, 2013), because it emphasizes the advantages of integrating technology into instruction, TPACK was judged pertinent.

The second is the digital divide theory (Kormos & Wisdom, 2021). It's assumed that instructors are more knowledgeable than pupils. On the other hand, when it comes to ICT efficiency and usage, the reverse seems to be true in this era of computers. The theory draws attention to the disparities in digital access that may exist between individuals in various contexts, including between students and teachers (Koehler, Mishra, Kereluik, & Graham, 2014 and Mukhari, 2016). Since the study examined ICT use by the two distinct variables—teachers and students from ABU, Zaria, and FCE Zaria—these theories—TPACK and the digital divide—were deemed appropriate for the study.

Review of Related Challenges and ways of Overcoming them

A special review of some challenges and ways of overcoming them was made globally, taking cognisance of Africa in general and Nigeria in particular. The first challenge is the high cost of ICT tools or materials. Jimoh (2019); Iyejare (2023), and Saha (2023) point out that ICT implementation in educational institutions necessitates large infrastructure, hardware, software, and maintenance expenses. Due to these high expenses, schools with tight budgets may find it difficult to fully adopt technology-driven instructional initiatives. Therefore, the need to subsidise the prizes of computers that are still very expensive and despite spirited efforts by the government agencies, NGO, corporate organisations and individuals to donate computers to as many schools as possible. A big percentage of the schools that are unable to purchase computers for use by their students still talk less of the teachers with meagre salaries.

The second is poor or lack of ICT Infrastructure. Mukalele (2018), Jimoh (2019), Bisong, Nkanu, Imoke, Eteng and Akpo (2023), and Saha (2023) posit that hardware, software, and similar other resources are limited infrastructure in rural areas, which has greatly hindered the provision of efficient and affordable ICT services to the teachers and students. Even though the schools under investigation are in urban areas, observation has shown that there is no significant difference regarding lack and poor ICT infrastructure. So, the authors suggest that the schools in conjunction with the Federal Ministry of Communication Technology, should focus on developing physical infrastructure

(including power, which shall be discussed separately.)

The third one is the lack of technical support. Iyejare (2023) and Saha (2023) observe that ICT is not exempted from technical hiccups and problems. Recurrent system failures, software defects, and network problems might hamper the process of teaching and learning. Furthermore, when systems fail, over-reliance on technology can result in serious setbacks that frustrate teachers and students. This point does not require an elaborate explanation as sometimes the school management has to look and expect an expert for days and weeks before fixing the hiccups.

Mukalele (2018), Bisong, Nkanu, Imoke, Eteng and Akpo (2023), Saha (2023), and Kibirige (2023) mention the lack of trained teachers to implement ICT in education as the fourth point. Despite the proliferation of ICT training institutions in Kaduna state, proficiency in ICT is still very low among the populace. Therefore, the importance of strengthening ICT human capital development should be accorded the necessary priority; the promotion of digital literacy and provision of appropriate digital literacy guidelines be taken seriously. According to Magen-Nagar and Maskit (2016), this makes stakeholders creative and innovative academics. Furthermore, Kabiru (2019) concurs that ICT instructors' proficiencyin policy, educational programs, instructional methods, innovation, organisation, and professional improvement were low.

The fifth point is the lack of quality training. Jimoh (2019), Iyejare (2023); and Saha (2023) explain that teachers require extensive training and assistance to use ICT tools in the classroom effectively. It is not enough to possess the ICT tools but to maximise their usage. Regrettably, many educators lack the abilities and understanding needed to use the available technology best. This knowledge gap may restrict the potential benefits of ICT integration into the curriculum. In addition, Aslan, and Zhu, (2017) explored the degree to which mentalities towards ICT, and uneasiness around its use to resolve the matter arising. Nath' (2019) suggests the in-service instructors' reviews on ICT amalgamation in the school curriculum and their discernments on the hindrances that avert teachers from using ICT inside the schoolroom.

The sixth point is funding. The school management and federal government do cry and lament their inability to make funds available to teachers and students and yet want to see or experience success. The complaint has always been there is no money. TETFund has tried in both schools, but the effort is grossly inadequate when compared with the population of those in need of the ICT service. In the same lamentations, Saha (2023) and Kibirige (2023) lament the lack of or insufficient government funds for the use of ICT in education. This is obvious in every Nigerian tertiary institution in addition to frustrating administrative support.

Bisong, Nkanu, Imoke, Eteng and Akpo (2023); and Saha (2023) observe the seventh point: weak government policies and legal and regulatory framework. Presently in Nigeria, the policies guiding the ICT sector are treated under various legislations. These laws are, however, not comprehensive enough to deal with convergence and other ICT-related issues in the current digital world. There is, therefore, an urgent need for the country to have a single comprehensive ICT policy to address affordable and reliable access. Ahmed, (2015) explains that the nonexistence of abilities and the absence of

vibrant ICT rules had been prime encounters stopping the combination process. Consequently, Mukhari (2016) states that the lack of ICT policies, weakens its systems, and teachers who are not trained in ICT are the biggest problems with adding technology to teacher training.

Broadband and the Internet make up the eighth point. According to Mukalele (2018), Jimoh (2019), and Bisong, Nkanu, Imoke, Eteng, and Akpo (2023), broadband and the Internet are widely recognized as the cornerstones of the shift to the knowledge economy.

Broadband has the power to open up whole new markets, transform the way public safety is managed, healthcare is provided, education is provided to students, government interaction is possible, and information is accessed, organized, and shared. Even in the two schools that are the subject of the investigation, there is a persistent lack of Internet, slow connectivity, or restricted access. While the rural school only has one tablet and neither school has constant electricity, the urban school's teachers have access to computers and other technologies for their use in the classroom. Due to the unequal access to infrastructure, urban school teachers should have more opportunities to incorporate different technological tools into their lesson planning and delivery, which will enhance their students' conceptual understanding. The digital divide between rural and urban schools can be exemplified by the unequal access to technology in these settings (Koehler, Mishra, Kereluik, & Graham, 2014; and Mukhari, 2016). This theory is heretical since it claims that certain Nigerian rural areas have access to electricity for longer periods of time than urban areas that run out of diesel.

Nineth point is that of public-private partnership. Bisong, Nkanu, Imoke, Eteng, and Akpo (2023) show concern for private sector participation as a major catalyst in 1CT development across the globe. However, many tertiary institutions have yet to take full advantage of the enormous potential of public-private partnerships in ICT development. Therefore, the necessary enabling environment should be created to realize this benefit. The school management can partner with individuals, companies, establishments, and other stakeholders from time to time. What is essential are commitment, dedication, accountability, and transparency.

The tenth point is endemic and epileptic power supply. Mukalele (2018); and Bisong, Nkanu, Imoke, Eteng and Akpo (2023) lament the country's power supply condition. ICT operations require constant electricity for their maximum use. Therefore, power supply should be massively increased, improved and worked upon through public-private partnership (PPP) so as to enhance the use of ICT in the schools. For instance, many schools are still not yet connected to electricity in Uganda, according to Bisong et al. (2023). It has been reported that the government encountered difficulties in establishing widespread access to the national electricity grid. As a result, schools situated in such regions are negatively impacted and may be unable to provide computer science courses.

Methodology

This qualitative study investigated the difficulties teachers and students at ABU and FCE have when using ICT to teach and learn CRS. Since a qualitative approach is flexible and can have a small or large number of participants depending on the context, it was chosen (Creswell and Creswell, 2018; Merriam & Grenier, 2019). Once more, qualitative research provides detailed information that is not possible with quantitative research. Ten ABU

instructors and sixteen FCE students made up one side of the population, while two hundred and eleven ABU students and seventy-eight FCE students made up the other. In a qualitative study, a sample size of two to twenty-five participants is sufficient, according to Creswell and Creswell (2018). Foley, Timonen, Conlon, and O'Dare (2021) see this as a means of theoretical sampling in grounded theory. To this end, snowball sampling techniques were used where initial informants were identified, and the subsequent sample was built by asking for the opinions and overcoming strategies from eight teachers (TABU1-3 and TFCE1-5 respectively) and nine students (SABU1 – 8 and SFCE1 - 4 respectively) using coding system as suggested by Williams and Moser (2019). Each respondent was given a code that differentiated one teacher or student from another and also from the two institutions. Ethical considerations such as informed consent, anonymity (protecting the identity of informants) and compensation (for time disruption, e.g. financial otherwise the process could be coercive), personal intrusion, including the sensitivity of questions, vulnerability of participants and the storage of confidential data were respected and duly observed.

The researchers conducted in-person interviews using the four pre-planned open-ended questions (with follow-ups as shown in appendices A and B). The questions were validated by four experts, two professors, and two Chief lecturers. Prior to gathering data, their recommended changes were put into practice. The questions were: What kinds of ICT are being used in teaching and learning of CRS? How does the administration of the school assist instructors and students in incorporating ICT into CRS instruction? What obstacles must be overcome to incorporate ICT into CRS education? How do teacher and learners get past the obstacles in the way of incorporating ICT into CRS instruction? It should also be noted that the researchers used start-up and rounding questions in line with the recommendations of Mwita (2022) like: ""Can you tell me about the ".... ." These were attended by follow-up questions of each as in the appendices)

Results and Discussions

The results are presented in a way that captures all the views of respondents using their coded assigned numbers rather than names, which is unethical. However, those with TABU codes are CRS teachers of ABU, and those with SABU codes are CRS students of ABU, respectively. Similarly, those with TFCE codes are CRS teachers of FCE, and those with SFCE codes are CRS students of FCE, respectively. Below are the responses of the interviewees to the four questions:

Teachers

TABU1 is a male teacher aged 51 and has 28 years of teaching experience. He used a laptop, projector, WhatsApp, email, and telegram to teach his CRS courses as an answer to question 1. The school authority supports him with WI-FI connection in the office, projector, and whiteboard and provides the opportunity for students to learn ICT as a general and elective course as response to question 2. Responding to question 3, he mentioned the challenges of students not having smartphones for browsing, incompetence on the part of teachers, lack of training, and insufficient infrastructure and Internet. He overcomes the challenge (question 4) by using a personal laptop, university-provided Wi-Fi, android handset and projector.

TABU2 is a male teacher aged 68 and has 33 years of teaching experience. He used a laptop, public address system, and WhatsApp to teach his CRS courses as an answer to question 1. The school authority supports him with WI-FI connection in the

office and whiteboard and provides the opportunity for students to learn ICT as a general and elective course in response to question 2. Responding to question 3, he mentioned the challenges of insufficient infrastructure and Internet. He overcomes the challenge (question 4) by reverting back to analogue or traditional chalk and talk.

TABU3 is a male teacher aged 49 and has 21 years of teaching experience. He used a laptop, projector, WhatsApp, Email, and Zoom to teach his CRS courses as an answer to question 1. The school authority supports him with WI-FI connection in the office, projector, and whiteboard and provides the opportunity for students to learn ICT as a general and elective course as response to question 2. Responding to question 3, he mentioned the challenges of lack of training, electricity, data for browsing, insufficient infrastructure and Internet. He overcomes the challenge (question 4) by use a personal laptop, a university-provided Wi-Fi, and an android handset.

Based on the responses of ABU teachers, they have all been supplied with WI-FI connections in their offices. However, each purchased a laptop for self-use. The application and integration of ICT were not at the same pace, especially with the older teachers. The older teachers prefer the chalk-and-talk method since they will not be able to grasp the technicalities of the technologies. These revelations are partially in line with the reviewed challenge of training by Mukelele (2018), Jimoh (2019), Bisong et al (2023), Iyejare (2023), Saha (2023); and Kiribige (2023). However, there are indications that some of the teachers do not make use of the provided infrastructures either because of a deficiency in knowledge or resistance to change from analogue to digital.

TFCE1 is a male teacher aged 42 and has 13 years of teaching experience. He used handset radio and WhatsApp to teach his CRS courses as an answer to question 1. The school authority supports him with a whiteboard and provides the opportunity for students to learn ICT as a general course as response to question 2. Responding to question 3, he mentioned the challenges of lack of laptops, incompetence on the part of teachers, lack of training, insufficient infrastructure and Internet, and epileptic electricity supply. He overcomes the challenge (question 4) by using personal data to browse.

TFCE2 is a female teacher aged 50 and has 13 years of teaching experience. She used a laptop and handset to teach her CRS courses as an answer to question 1. The school authority supports her with a whiteboard and provides the opportunity for students to learn ICT as a general course in response to question 2. Responding to question 3, she mentioned the challenges of illiteracy and incompetence on the part of teachers, lack of training, insufficient and obsolete infrastructure and Internet, epileptic electricity supply. She overcomes the challenge (question 4) by use of personal laptop and data.

TFCE3 is a male teacher aged 64 and has 23 years of teaching experience. He used a laptop and handset to teach his CRS courses as an answer to question 1. The school authority supports him with a whiteboard and provide the opportunity for students to learn ICT as a general course as response to question 2. Responding to question 3, he mentioned the challenges of poverty, time, resistance to change, insufficient infrastructure and Internet, and epileptic electricity supply. He overcomes the challenge (question 4) by using a personal laptop and data.

TFCE4 is a female teacher aged 42 and had 10 years of teaching experience. She used laptop, handset radio and WhatsApp for

teaching her CRS courses as answer to question 1. The school authority supports her with whiteboard and provide the opportunity for students to learn ICT as a general course as response to question 2. Responding to question 3, he mentioned the challenges of lack of laptops, incompetence on the part of teachers, lack of training, insufficient infrastructure and Internet, and epileptic electricity supply. She overcomes the challenge (question 4) by using of personal laptop and data.

TFCE5 is a female teacher aged 49 and has 13 years of teaching experience. She used a laptop, handset, and radio to teach her CRS courses as an answer to question 1. The school authority supports her with a whiteboard and provides the opportunity for students to learn ICT as a general course in response to question 2. Responding to question 3, she mentioned the challenges of lack of training, insufficient infrastructure and Internet and inadequate funds. She overcomes the challenge (question 4) by using of personal laptop and data.

From the responses of FCE teachers, they were never supplied with WI-FI connections in their offices. They had to purchase laptops and Android handset for self-use. The application and integration of ICT was limited. This means some of the teachers have acquired the knowledge, but the practical opportunity has yet to be provided like that of ABU. Hence, part of the reviewed literature by Mukelele (2018), Jimoh (2019), Bisong et al. (2023), and Saha (2023) have been confirmed, while others are unique to the school and teachers.

Students

SABU1 is a male student aged 25 who has 4 years of learning experience in ABU. He used laptop, WhatsApp, and internet cafe for learning his CRS courses in response to question 1. The school authority supports him with WI-FI, whiteboard, e-library and general and elective courses in ICT in response to question 2. Responding to question 3, he mentioned the challenges of data when WI-FI stops working, and electricity; he overcomes the challenge (question 4) by saving money to buy laptop and an android handset.

SABU2 is a female student aged 20 who has 3 years of learning experience in ABU. She used internet cafe and projector for learning his CRS courses in response to question 1. The school authority supports her with WI-FI, whiteboard, e-library, and general and elective courses in ICT as response to question 2. Responding to question 3, she mentioned the challenges of a lack of laptops and data for browsing. She overcomes the challenge (question 4) by working with those who have the ICT materials.

SABU3 is a female student aged 22 who has 4 years of learning experience in ABU. She used a laptop, internet cafe and projector to learn her CRS courses in response to question 1. The school authority supports him with WI-FI, whiteboard, e-library, and general and elective courses in ICT in response to question 2. Responding to question 3, she mentioned the challenges of lack of data for browsing. She overcomes the challenge (question 4) by using a laptop to download course materials.

SABU4 is a female student aged 25 who has 4 years of learning experience in ABU. She used laptop, WhatsApp, and internet cafe for learning her CRS courses in response to question 1. The school authority supports her with WI-FI, whiteboard, e-library, and general and elective courses in ICT as response to question 2. Responding to question 3, she mentioned the challenges of lack of funds to ICT materials and electricity. She overcomes the challenge (question 4) by 'friends' support.

SABU5 is a male student aged 30 who has 3 years of learning experience in ABU. He used internet cafe for learning his CRS courses in response to question 1. The school authority supports him with WI-FI, whiteboard and a general or elective course in ICT in response to question 2. Responding to question 3, he mentioned the challenges of ICT infrastructure and electricity. He overcomes the challenge (question 4) by saving money to buy an android handset.

SABU6 is a female student aged 18 and had 2 years of learning experience in ABU. She used laptop, WhatsApp, and internet cafe for learning her CRS courses in response to question 1. The school authority supports her with WI-FI, whiteboard, e-library, and general and elective course in ICT as response to question 2. Responding to question 3, she mentioned the challenges of data and electricity when WI-FI stops working. She overcomes the challenge (question 4) by helping to download materials for her course mates using either a laptop or android handset.

SABU7 is a female student aged 19 who has 3 years of learning experience in ABU. She used a laptop, WhatsApp, and internet cafe to learn her CRS courses in response to question 1. The school authority supports her with WI-FI, whiteboard, e-library, and general and elective course in ICT as response to question 2. Responding to question 3, she mentioned the challenges of data and electricity when WI-FI stops working. She overcomes the challenge (question 4) by saving money to buy another laptop as the current one was faulty.

SABU8 is a male student aged 34 who has 4 years of learning experience in ABU. He used internet cafe for learning his CRS courses in response to question 1. The school authority supports him with WI-FI, whiteboard, e-library, and general and elective courses in ICT as response to question 2. Responding to question 3, he mentioned the challenges of data when WI-FI stops working, and electricity, He overcomes the challenge (question 4) by staying close to course mates who have the ICT materials

The challenges of the students of ABU students were multi-facet. They range from lack of personal ICT equipment to sharing. In addition, relying on course 'mates' mercy. This revealed the poverty level of some their parents to provide the needed items for learning. ABU provided WI-FI for the students to login using their assigned surnames and passwords. Despite this opportunity, some lack knowledge of smart phone and have not asked how to use them.

SFCE1 is a male student aged 22 and had 3 years of learning experience in FCE. He used internet café, whiteboard, and e-library for learning his CRS courses in response to question 1. The school authority supports him with e-library and general course in ICT as responses to question 2. Responding to question 3, he mentioned the challenges of lack of data, WI-FI and electricity. He overcomes the challenge (question 4) by copying and photocopying notes.

SFCE2 is a female student aged 20 who has 3 years of learning experience in FCE. She used whiteboard, e-library, and internet cafe for learning her CRS courses in response to question 1. The school authority supports her with whiteboard, e-library, and general course in ICT as responses to question 2. Responding to question 3, she mentioned the challenges of lack of data, WI-FI and electricity. She overcomes the challenge (question 4) by making use of personal data and e-library.

SFCE3 is a female student aged 19 and had 2 years of learning experience in FCE.

She used whiteboard, e-library for learning her CRS courses in response to question 1. The school authority supports her with whiteboard, e-library and general course in ICT as responses to question 2. Responding to question 3, she mentioned the challenges of smart phone, Wi-Fi, and electricity. She overcomes the challenge (question 4) by planning to buy a smart phone.

SFCE4 is a male student aged 21 and had 3 years of learning experience in FCE. He used internet café, whiteboard, and e-library for learning his CRS courses in response to question 1. The school authority supports him with whiteboard, e-library, and general course in ICT as responses to question 2. Responding to question 3, he mentioned the challenges of lack of data, WI-FI and electricity, He overcomes the challenge (question 4) by saving money to buy a phone to browse with.

The challenges of the FCE students were more multi-faceted than those of ABU. They range from lack of ICT equipment to sharing, lack of android phone for browsing and WI-FI in the school. This revealed that FCE was yet to provide WI-FI opportunities for the students. In addition, the poverty level of some of their parents made it impossible to provide the needed items for learning. Some of them do not patronise the e-library provided by the College, either because of a lack of orientation or because they have decided not to use it.

Conclusion

Based on the responses of ABU teachers, they have all been supplied with WI-FI connections in their offices. However, the application and integration of ICT were not at the same pace, especially with the older teachers. The older teachers prefer chalk and talk method since they cannot grasp the technologies' technicalities. Similarly, the students were also provided WI-FI for them to log in using their assigned surnames and passwords. Despite this opportunity, some lack the knowledge of smartphone and have not asked how to use.

On the other hand, the responses of FCE teachers they were never supplied with WI-FI connection in their offices. They had to purchase laptops and android handsets for self-use. Some of the teachers have acquired the knowledge, but the practical opportunity was yet to be provided in the form of free WI-FI. In the same vein, most students do not patronise the e-library provided by the college, either for lack of orientation or because they have decided not to use the facilities.

Recommendations

From the responses of the interviewees, the following recommendations are made:

1 The government should provide adequate funds to the education sector and strong policies that will enforce the proper implementation of ICT in educational institutions.

2 The school's management should organise workshops and training programmes for teachers and non-teaching staff to make them competent to handle ICT infrastructure and services.

3 Teachers should ensure that they are well trained on how to use ICT in teaching and properly guide the students on lesson delivery for better comprehension.

4 The student should seek basic knowledge of ICTs, familiarise and patronise the available technologies in their schools.

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