



International Journal of Education and Teaching

Publisher's Home Page: <https://www.svedbergopen.com/>



Research Paper

Open Access

Lived Experiences of Students on Adult Education Programs with Information Communication Technology (ICT) Services

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Article Info

Volume 3, Issue 2, December 2023

Received : 11 August 2023

Accepted : 18 November 2023

Published : 05 December 2023

doi: [10.51483/IJEDT.3.2.2023.102-111](https://doi.org/10.51483/IJEDT.3.2.2023.102-111)

Abstract

Information Communication Technology (ICT) greatly facilitates the acquisition and absorption of knowledge, offering opportunities to improve educational systems and open access to knowledge in ways unimaginable not long ago. Access to ICTs is therefore a key enabler. The study sets to find out lived experiences of students on Adult Education programs with information communication technology services at UNESWA, Kwaluseni. Ninety (90) students in the final year classes of the Adult Education programmes and six (6) ICT Center technical support staff responsible for the computer laboratories at Kwaluseni were studied. The study's methodological approach was a mixed method. It was concluded that challenges with access to ICT services, alternative ways of access and attitudes of students towards ICT services predicted the lived experiences of students on Adult Education programs with ICT services.

Keywords: *Information Communication Technology (ICT), Access to ICT services, Lived experiences, Needs for ICT services, Students on adult education programs, Case study*

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1. Introduction

Information Communication Technology (ICT) is changing every facet of people's lives. It is changing the way people live, it is changing the way people do business and most importantly, the way they learn. Information is a key resource for learning teaching and research. This brings the need for effective methods of information processing and transmission (Hawkins, 1998). In recent years, there has been a groundswell of interest in how computers and the Internet can be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal settings (Cuban, 1986). When used appropriately, ICT helps to expand access to education, strengthens the relevance of education and raises quality by creating an active process connected to real life.

Education systems around the world are under increasing pressure to use new ICTs (UNESCO, 2002 as cited by Yuen *et al.*, 2008). The premise that ICT is important for bringing changes to classroom teaching and learning is the basis for the pressure. ICT skills include the ability to become lifelong students within the context of collaborative inquiry and the ability to work and learn from experts, peers in a connected global community (Law *et al.*, 2008). The information society demands a workforce that can use technology as a tool to increase productivity and creativity. This involves identifying

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reliable sources of information, effectively accessing these sources of information, synthesizing and communicating that information to colleagues and associates (Alibi, 2004).

ICT is a diverse set of technological tools and resources used to communicate, and to create, disseminate, store and manage information (Kaur, 2021). This means that ICT helps in the storage and management of information. Ayo (2001) defined ICT as the use of computer systems and telecommunications equipment in information processing. ICT, as described Scott (2004), encompasses a range of application, communications and technologies which aid information retrieval and research communication and administration. These include: Internet access, electronic mail, CD-ROMS, telephone, on-line databases, library services and fax machines.

Eswatini, like most less-developed countries, face challenges in achieving the Millennium Development Goals (MDGs) and education for all initiatives. The major goal of ICT in education in Eswatini is to craft an education system in which students leave schools confident, innovative and industrious users of new technologies, including information communication technologies, and understand the impact of those technologies on society (Isaacs, 2007). Education is seen as the natural platform for equipping the nation with ICT skills. Information communication technology has a direct role to play in education and, if appropriately use, ICT can bring many benefits to the classroom as well as education and training processes in general (Kipsoi *et al.*, 2012). ICT is increasingly shaping the nature of global economic, social and political life. As such societies may need to provide equal opportunities to ICT access, creative and innovative use for all learners (Vilakati, 2014).

The University of Eswatini is a national institution of higher education established by the Parliament of Eswatini through Act No. 2 of 1982. Its mandate is to produce the critical mass of highly skilled human resource needed by the country and global community. The university has eight faculties, two institutes and several units and centres including the Information Communication Technology Center (ICTC). In the financial year 2012-2013, the ICT Centre introduced Wi-Fi (wireless network) as a means to extend and improve the University data network infrastructure. The Report of the Vice Chancellor (2012-2013) revealed that the Internet continues to be a major resource of information for students and staff of the University. The uptake of Moodle continues to increase at a high rate, with more academic staff using Moodle as a means to enhance the teaching and learning functions. The authentication required to access the Wi-Fi is such that students must have laptops which can be fed the authentication so that they can access Internet through the wireless network.

The ICTC has five computer laboratories that are used by students in the campus. It has technical support staff that are responsible for the computer laboratories who work during the week, that is, from Monday to Friday. Students at the University of Eswatini in the first year of their programs take the computer foundation course in the computer laboratories, taught by their lecturers with the assistance of the technical support staff. Students are full-time, part-time and on distance learning mode. The laboratories are open during the week when the technical support staff are available. On Saturdays, the laboratories open at 9:00 a.m. and are mostly used by students who have lectures in the laboratories (Computer Foundation Course). The computer laboratories close at 5:00 p.m. on Saturdays and on Sundays, the computer laboratories open at 3:00 p.m. and close at 10:30 p.m.

2. Problem Statement

In the education system, the Government of Eswatini was committed to have computer laboratories in all tertiary education institutions, of which the University of Eswatini is one, with Internet connectivity by the end of 2007 and ensuring that teacher training institutions offer computer studies by 2008. ICT literacy is supposed to be a mandatory entry requirement into tertiary institutions by 2015 and ICT education programs are to be introduced at all levels in the education system (International Telecommunication Union, 2010).

The University of Eswatini has Computer Foundation courses that are a requirement for students taking first year of study in any program. The Diploma in Adult Education year 1, the Bachelor's Degree in Adult Education year 1 and the Master's Degree in Adult Education year 1 take the Introduction to Computing for Education (EDF 102). After having gone through the course, the expectation is that students would submit typed assignments and must have used the ICT services initially available on campus. The computer laboratories where the ICT services are offered open from 9:00 a.m. to 5:00 p.m. on Saturday and on Sunday, the laboratories open from 3:00 p.m. to 10:30 p.m.

The Certificate, Diploma and Bachelor's Degree in Adult Education students attend lectures on Saturdays and Sundays from 8:30 a. m. to 4:30 p. m. When the students on these programs finish their classes, they are tired, having been in class the whole day. At the end of lectures, they rush home to attend to various commitments or retire for the day in readiness for work the following day. It is therefore only imaginary as to when these students access ICT services at

the University of Eswatini because when they are on campus on weekends they are in class and during the week they are at work.

The students in the Master's Degree programme attend lectures during the week. At the end of lectures, the students go back to work to catch up on the day's activities they have missed whilst at the University. These students are supposed to submit assignments which require them to have had access to the ICT services on campus. Until recently, Postgraduate students were required to take undergraduate Computer Foundation course. It was against this backdrop that the researcher conducted the scientific inquiry on the lived experiences of students on the Adult Education programs with ICT services at the University of Eswatini, Kwaluseni campus.

3. Objectives of the Study

The following objectives guided the study:

1. Identify the needs for ICT services by students on Adult Education programs at UNESWA;
2. Find out the benefits of access to ICT services by students on Adult Education programs at UNESWA;
3. Find out the alternative ways in which students on Adult Education programs access ICT services at UNESWA;
4. Find out the challenges/constraints with access to ICT services faced by students on Adult Education at UNISWA;
5. Establish the coping skills/mechanisms of students on Adult Education on access to ICT services at UNESWA.

4. Literature Review

4.1. Information Communication Technology

Information Communication Technology (ICT) and its continuous innovations have improved many efficiencies in modern day living. For example, it has made governance effective and convenient through e-Government (Dwivedi and Bhatti, 2005; Gupta, 2011). Through e-Commerce the process of buying and selling can be done in a cost effective and time saving manner (Goel, 2007). Furthermore, equal access to quality education has been made possible through features such as e-Learning, educational software, World Wide Web (www) among others (Jhree, 2005; Bunt-Kokhuis, 2012). The significance of e-Learning for the teaching and learning process is that it allows learning to be done anywhere and at any time (Goi and Ng, 2009). Educational software aids in simplifying difficult concepts, makes learning fun and easy (Simkins *et al.*, 2003).

Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy (Ibid). However, there appears to be a misconception that ICTs generally refer to computers and computing-related activities. This is unfortunately not the case, although computers and their application play a significant role in modern information management, other technologies and/or systems also comprise of the phenomenon that is commonly regarded as ICTs. Pelgrum and Law (2003) stated that near the end of the 1980's the term 'computers' was replaced by Information Technology (IT) signifying a shift of focus from computing technology to the capacity to store and retrieve information. This was followed by the term 'ICT' around 1992, when e-mail started to become available to the general public (Pelgrum and Law, 2003).

The field of education has been affected by ICTs, which have undoubtedly affected teaching, learning and research (Yusuf, 2005). A great deal of research has proven the benefits to the quality of education (Al-Ansari, 2006). ICTs have the potential to innovate, accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers as well as strengthening teaching and helping learning institutions change (Davis and Tearle, 1999; Lemke and Coughlin, 1998 cited by Yusuf, 2005). Jhree (2005) stated that much has been said and reported about the impact of technology, especially computers, in education. It is generally believed that ICTs can empower teachers and students, promote change and foster the development of 21st century skills. It is believed that specific uses of ICT can have positive effects on learner achievement when ICTs are used appropriately to complement a teacher's existing philosophies. In short, ICT has a major role to play in education. It is worth mentioning that through the use of ICT, students no longer have to rely solely on printed books and other material in physical media housed libraries (and available in limited quantities) for their educational needs. Yusuf (2005) stated that successful education cannot be assured without the use of effective communication and technological tools (electronic mail and Internet). For students to be abreast with the present information age, these services need to be accessible to enhance the teaching and learning process.

4.2. Benefits of ICT Services in Adult Education Programs

The use of ICT enhances the teaching and learning process. Using ICT in educational settings, by itself acts as a catalyst for change in this domain. ICTs, by their nature, are tools that encourage and support independent learning. Students using ICTs for learning purposes become immersed in the process of learning and as more and more students use computers as information sources and cognitive tools, the influence of the technology on supporting how students learn will continue to increase (Noor-Ul-Amin, 2013).

ICT enhances the quality and accessibility of education. According to Noor-Ul-Amin (2013), ICT increases the flexibility of delivery of education so that students can access knowledge anytime and from anywhere. It can influence the way students are taught and how they learn as now the processes are learner-driven and not by teachers. With the help of ICT, students can now browse through e-books, sample examination papers, etc. and can also have easy access to resource persons, mentors, experts, researchers, professionals, and peers all over the world.

ICT provides opportunities to access an abundance of information using multiple information resources and viewing information from multiple perspectives, thus fostering the authenticity of learning environments. It may also make complex processes easier to understand through simulations that, again, contribute to authentic learning environments. Thus, ICT may function as a facilitator of active learning and higher-order thinking (Bindu, 2016). Furthermore, ICT may serve as a tool to curriculum differentiation, providing opportunities for adapting the learning content and tasks to the needs and capabilities of each learner and by providing tailored feedback (Smeets, 2005).

The use of ICT enhances scholastic performance. Based on the extensive usage of ICTs in education, the need appeared to unravel the myth that surrounds the use of information communication technology as an aid to teaching and learning, and the impact it has on students' academic performance. ICTs are said to help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality. ICT helps students in their learning by improving the communication between them and the instructors (Valasidou *et al.*, 2005).

4.3. Access to ICT Services

Access to information through ICT increases the information accessible to individuals to support them in trying new strategies, thinking and creativity that are reflective in practice aimed at engaging them to new innovations through the use of ICTs (Ololube, 2006). Information Communication Technologies (ICTs) are indispensable and have been accepted as part of the contemporary world especially in industrialized societies. In fact, cultures and societies are adjusted to meet the challenges of the knowledge age. The pervasiveness of ICT has brought about rapid changes in technology and has caused social, political, and global economic transformation (Yusuf, 2005).

According to UNESCO Institute for Statistics (2006), achievement of universal primary education which is one of the basic Millennium Development Goals, can be facilitated by emerging technologies. The main barriers to achieving universal primary education are issues such as lack of proper transport facilities, poor school meal programs, lack of adequate teachers and gender-sensitive education, but the introduction of ICTs can improve education provision. This is evidence that the provision of ICT services is important in bringing about sound education. From the individual stand point, access to certain forms of ICTs may increase the choices available to individuals. With increased access to information, individuals are able to make more informed decisions. This is the very essence of empowerment (*Ibid*).

4.4. Challenges with access to ICT Services

Access to ICT infrastructure and resources in universities is a necessary condition to the integration of ICT in education (Plomp *et al.*, 2009). Effective adoption and integration of ICT into education in Universities depends mainly on the availability and accessibility of ICT resources such as hardware, software, etc. Obviously, if students cannot access ICT resources, then they will not use them. Therefore access to ICT services is key to effective education. A study by Yildirim (2007) found that access to technological resources is one of the effective ways to pedagogical use of ICT in learning. It is therefore necessary that students have access to quality technological resources/services if learner-centered technology learning is to be encouraged.

According to Barolli *et al.* (2012), the presence of technology in every aspect of people's lives in the 21st century faces up the people all around the world with new choices, opportunities and challenges that have emerged and developed, have created a new global economy powered by ICT and driven by knowledge. A study conducted by Wells and Wells (2007) on factors that are challenges to ICT use by students in Ghana revealed that students face challenges with lack of access to computers due to limited access time allied to the inadequate number of computer and other ICT resources was the limited access time.

The study further revealed that this particular challenge was strongly linked with the inadequate number of computers as the laboratory use was limited to 40 minutes per week per student. The study also revealed that the laboratory closes after working hours, therefore, students do not have access to the laboratory after 5:00 p.m. on working days and during the weekends. Similarly, the Internet access points were not sufficient for any meaningful use of this resource for academic work. In the same study, students at University of Education in Winneba cited limited access time that laboratories do not open on weekends and after classes and the unavailability of technical support. The study revealed that even though various computer laboratories have been set up for students, ICT training and use, the large learner population limits access time to only official time-table sessions and limited access after classes. Most laboratories are not open after 10:00 p.m. on working days, and none is officially opened during weekends (Wells and Wells, 2007).

The barriers related to the accessibility of new technologies for students are widespread and differ from country to country. Empirica (2006) found that lack of access is the largest barrier. Pelgrum (2001) explored practitioners' views from 26 countries on what were the main obstacles to the implementation of ICT in schools and concluded that four of the top ten barriers were related to the accessibility of ICT. Sicilia (2005) found that students complained about how difficult it was to always have access to computers. According to BECTA (2004), inaccessibility to ICT services may be the result of one of a number of factors such as poor organization of resources, poor quality hardware, inappropriate software, or lack of personal access for students (BECTA, 2004).

4.5. Theoretical Framework for Information Communication Technology

The Unified Theory of Acceptance and Use of Technology (UTAT) model was used to study the lived experiences of students on Adult Education programs with ICT services. In this study, behavioral intention was used to indicate the actual influence on usage of ICT services. It is mentioned in many research papers (Venkatesh *et al.*, 2003; Irani *et al.*, 2008; Carter and Belanger, 2005; Isaac, 2007) that the behavioral intentions will have a positive and direct influence on usage behavior. Behavioral intention has a direct influence of adoption of technology (Ajzen, 1991). In addition, the relation between behavioral intention to use a technology and actual usage is well-established and both variables could be used to measure technology acceptance (Ajzen, 1991; Tayler and Todd, 1995; Venkatesh and Morris, 2000). Thus, in this study, lived experiences were the behavioral intention for the students to want to access ICT services.

Performance expectancy was defined as the degree to which using technology catered for the needs for ICT services by students on Adult Education programs; effort expectancy is the degree of ease associated with benefits or gains from using ICT services as well as perceived difficulties in accessing ICT services; social influence is the extent to which students on Adult Education programs perceive that important others (e.g., peers, mentors, and instructors) believed they should have access to ICT services; and facilitating conditions referred to students' perceptions of the ICT Center services and support available to perform a behavior. According to UTAUT, performance expectancy, effort expectancy and social influence are theorized to influence behavioral intention to use technology, while behavioral intention and facilitating conditions determine technology use (Venkatesh *et al.*, 2012).

5. Methodology

The study's methodological approach was both qualitative and quantitative. A Nominal Group Technique (NGT), a questionnaire and interviews were used to collect data. The survey instrument used was an eight (8) page questionnaire with a Likert-type scale containing statements of lived experiences of students with ICT services. With each statement, a six point scale was used with options ranging from 'strongly disagree' to 'strongly agree'.

5.1. Data Collection Procedures

The Nominal Group Technique workshop was conducted where participants gave ideas and later ranked them in order of priority on their views of the phenomenon being studied. The responses were then used to develop a questionnaire which was hand-delivered to the respondents to fill. The completed questionnaires were collected soon after being filled by the students. The researcher allowed one week for collecting the questionnaires from students who could not complete them during their class break time. A record of the questionnaires was kept in order to ensure that they were all returned and, if not, a follow-up was made to increase the rate of response. The six ICT technical support staff members were interviewed individually so as not to be influenced by their colleagues and to get different views. The researcher chose to interview each staff member within their familiar environments, which were their offices.

5.2. Data Analysis

Data were analyzed, interpreted and sorted according to the objectives of the study. The Microsoft Statistical Package for the Social Sciences (SPSS) version 20.0 was used to interpret data, producing descriptive statistics, correlation and

regression. Since the data were coded, the researcher entered the labels and variables on the SPSS sheet using numbers corresponding to the coded data. Text was used to explain what the table and figures represented. Data from interviews were analyzed using qualitative analysis through identifying recurring patterns which were similar or belonged to the same thematic area. All the collected information was transcribed verbatim. Data were organized according to the responses to the interview questions. Quotes and vignettes were used to support data presented.

6. Study Findings and Discussion

Findings revealed that respondents were mainly (65.5%) female. The highest (56.0%) number of respondents who participated in the study was from the Diploma in Adult Education program. Most (56.0%) respondents held a Certificate in Adult Education. The highest (74.0%) number of respondents had either a computer, a laptop, an iPad or a tablet. Only 52.4 percent of the respondents had ICT facilities at their workplaces.

6.1. Needs for ICT Services by Students

It has been established from the findings of the study that students on Adult Education programs had needs for ICT services. Means and standard deviations for each item were computed and presented. The overall mean of 5.41 indicated that students needed the ICT services at UNESWA. Students have relative advantage in using ICT services. From the information given on the frequency of needs for ICT services, the findings revealed that students on Adult Education programs needed ICT services on a daily basis.

6.2. Benefits of ICT Services to Students

The study established the benefits gained by students on Adult Education programs. Means and standard deviations for each item were computed and presented. The overall mean (5.37) indicated that students on Adult Education programs benefited from accessing ICT services at UNESWA. DOI's visibility and UTAUT's social influence state the degree to which an individual perceives that significant others believe that they should use the system. Students derive benefits from having access to ICT services at UNESWA.

On the expectations of students on Adult Education programs in ICT services, the overall mean (5.67) indicated that students had high expectations upon accessing ICT services at UNESWA, such as, high Internet speed ($M = 5.78$), having more computer laboratories ($M = 5.78$) and having unlimited access to Internet ($M = 5.75$). The expectations were in line with those found in a study by Haywood *et al.* (2007), whose findings indicated that students automatically think that ICT will improve their learning, giving them access to data and research resources.

Students on Adult Education programs had an overall mean of 4.19 which indicated that they had attitudes towards ICT services. The findings revealed that students had a poor attitude towards ICT services because of poor service delivery of ICT services and they felt that ICT service delivery should improve. The findings revealed that students get discouraged each time they try to access ICT services and they fail, thus developing a negative attitude towards the services. TPB suggests that human behavior is governed by personal attitudes, but also by social pressures and sense of control (Korpelanien, 2011).

6.3. Alternative Ways of Access to ICT Services

From the information given on the alternative ways in which students on Adult Education programs accessed ICT services at UNESWA, it was gathered that when students are unable to access ICT services at UNESWA, they sought other ways to access ICT services. These were (1) use of cellular phones ($M = 4.89$); (2) use of own laptops ($M = 4.18$) and use of Internet café ($M = 3.75$). The overall mean (3.54) indicated that students sought alternative ways to access ICT services when they were unable to access them at UNESWA.

6.4. Challenges/Constraints with Access to ICT Services Faced by Students

The findings of the study revealed that students on Adult Education programs faced challenges/constraints with access to ICT services at UNESWA. Means and standard deviations for each challenge were computed and presented. The overall mean of 4.98 indicated that students faced challenges when they access ICT services at UNESWA. The challenges with the highest means were (1) late opening of computer laboratories on weekends ($M = 5.39$); (2) inadequate computer laboratories ($M = 5.29$); (3) expiry of user passwords ($M = 5.25$); (4) slow Internet speed ($M = 5.07$).

Students were asked to make suggestions on how the challenges/constraints faced with access to ICT services could be resolved. From the information given, it was revealed that the highest 16 (19.0%) number of students indicated that UNESWA should provide more technical support staff, 13 (15.5%) students indicated that the service at the ICT

Centre should improve, and 11 (13.1%) students indicated that more computer laboratories with ventilation should be provided. The findings are in line with the model used in this study—UTAUT—which aims to explain user intentions to use an information system and subsequent behavior.

6.5. Coping Skills/Mechanisms on Access to ICT Services

From the information given on coping skills/mechanisms exercised by students on Adult Education programs on access to ICT services, the findings revealed that the highest (26.2%) number of students looked for private assistance for their ICT services needs, 22.6% of the students used Internet café and 20.2% used their laptops or desktops. The students made a number of suggestions that could help the ICT Center to provide quality services and these were (1) have more hot spots (wireless network); (2) the ICT Center should provide computers in good working condition; (3) improve network service; (4) upgrade the computer system; (5) have quality ICT equipment; (6) include Adult Education students in UNESWA plan.

7. Conclusion

Based on the findings of the study, and the factors found to influence the lived experience of students on Adult Education programs with ICT services, the following conclusions are drawn.

Students on Adult Education programs are part of the University system even though they attend classes on weekends, they need ICT services found in the campus in order to fulfill their academic activities. With respect to needs for ICT services, it was concluded that students need ICT services for (1) research; (2) download relevant information; (3) type assignments; (4) browse the Internet. These services were needed on a daily basis.

With regards to benefits of ICT services to students, it was concluded that the following items were benefits enjoyed by students when they access ICT services: (1) gaining experience in using computers; (2) gaining knowledge on a particular subject; (3) browsing the Internet. The use of Internet offered students relevant and up-to-date information that could be used in their assignments and research projects. It was concluded that students resorted to the following alternative ways: (1) use of cellular phones; (2) use of laptops; (3) Internet café; (4) private assistance. It is evident, therefore, that students who lack access to ICT services miss out on gaining new knowledge brought about by information on the Internet. In order for the students on Adult Education programs not to miss out on such opportunities, they found alternative ways of accessing ICT services. The support staff mentioned that the Internet speed at the University is very slow, confirming the reason behind students opting for Internet cafés.

The study concluded that the challenges faced by the students were: (1) late opening of the computer laboratories on weekends; (2) inadequate computer laboratories; (3) expiry of user passwords; (4) slow Internet network; (5) unavailability of technical staff on weekends; (6) limited time for use of Internet. The students further suggested ways on how the challenges/constraints with access to ICT services could be resolved. It was concluded that students cope with the inability to access ICT services at UNESWA by: (1) finding private assistance; (2) using Internet cafe's; (3) using their laptops or desktops.

It was therefore concluded that the factors influencing lived experiences of students on Adult Education programs with ICT services were: (1) challenges with access faced by students on Adult Education programs with ICT services; (2) alternative ways of access to ICT services by students on Adult Education programs; (3) attitudes of students on Adult Education programs towards ICT services.

8. Recommendations

Based on the findings of the study, the following recommendations are made.

1. The needs for ICT services cannot be overlooked. The Department of Adult Education, in collaboration with the ICT Centre needs to devise a plan that will accommodate convenient times for students on Adult Education program to access ICT services during study weekends. A period for ICT services can be slotted in the time-table so that students do not wait for their classes to end before they could go to the computer laboratories.
2. The benefits for ICT services cannot be exhausted. Students on Adult Education programs suggested that the Department of Adult Education should offer the Computer Foundation course at the certificate level, as this course will offer them skills and knowledge in the area of ICT. Since the students realize the overwhelming benefits of ICT services, they should find time to access the ICT services during the time when computer laboratories are open.

3. The students resort to alternative ways to access ICT services when they find it impossible to access the services on campus. Some of these alternative ways come with a cost yet the students have already paid for being at the university and should have access to ICT services in the campus. The ICT Centre in collaboration with UNESWA Management should consider widening the availability of the existing wireless networks so that students who own laptops can access ICT services and reduce the number of students who want to use the labs.
4. It cannot be disputed that students on Adult Education programs faced a number of challenges/constraints with access to ICT services at UNESWA, which challenges/constrains force them to resort to alternative ways to access ICT services. Also, the challenges were discouraging students and they ended up developing poor attitudes towards ICT services at UNESWA. The ICT Centre, in collaboration with UNESWA management, should consider employing staff for the ICT Centre who can work in shifts so that the computer laboratories are open for as long as the students need the services. This will also ensure that students always have technical support and that the university should be by more computers.
5. Students on Adult Education programs exercise coping skills/mechanisms whenever they are unable to access ICT services at UNESWA. The department of Adult Education, in collaboration with the ICT Center should consider setting aside a computer laboratory that will be used by students on Adult Education programs during study weekends as it will support the students' needs for ICT services.
6. It is realized that the above recommendations for action involve financial inclinations. The University of Eswatini could source funding to upgrade the ICT services from organizations such as UNESCO and World Bank.

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Cite this article as: Ntfombi Venencia Kunene (2023). Lived Experiences of Students on Adult Education Programs with Information Communication Technology (ICT) Services. *International Journal of Education and Teaching*, 3(2), 102-111. doi: 10.51483/IJEDT.3.2.2023.102-111.