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Adult learners' lived experiences of learning technology at a private university in Zimbabwe

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Abstract

Learning of technology by adult learners is pervasive, with unique challenges that might affect their continuity in studying technology. Various studies have focused on the opportunities and challenges faced by adult learners learning technology, but a few have focused on their experiences in learning a technology course. This cross-sectional survey aims to explore the lived experiences of adult technology learners, to understand their perceptions and views on learning technologies, while also focusing on the opportunities and challenges they encountered. Participants (n = 34) were adult learners who completed a technology course at a private university in Zimbabwe. Data collected through a cross-sectional survey showed five themes that helped show learners' experiences after completing the technology course. The results showed that learners were disoriented, comfortable, collaborative, and had work-school-life balance challenges, saw benefits and challenges, and believed they had future prospects in technology after completing the course. The results from the interview with the instructor showed that when teaching adult learners, instructors should facilitate learning, empower learners, and above all, allow learners to be autonomous. It is recommended that learners be equipped with the necessary technology and requisite information that would help them learn better and not quit their studies.

Keywords: adult learners, technology, challenges and opportunities, collaboration, teaching and learning

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1. Introduction

The learning of technology among adult learners and the integration of technology in their education at the tertiary level are growing exponentially (Gonzáles, Castillo, Pauca, & Chávez, 2022; Mhlongo, Mbatha, Ramatsetse, & Dlamini, 2023; Wang, 2010) and have become increasingly popular (Azad, 2023). Yet, little is known about their views, perceptions, and beliefs about learning technology in Zimbabwe. A few studies in Zimbabwe have specifically examined the experiences of adult learners, hereafter referred to as learners, in technology courses, with most focusing on broader challenges and potential solutions (Chirume & Kaseke, 2020). Little, if any, has been researched and documented in Zimbabwe about adult learners' views, perceptions, and experiences of learning a particular technology course at the tertiary level. Studies in this field have focused on integrating technology into their teaching and learning or have concentrated on teaching using technology, especially after the outbreak of the Corona Virus Disease (COVID-19) pandemic (Rott & Schmidt-Hertha, 2024).

Who is an adult learner? The father of andragogy, Malcolm Knowles, gave four definitions of an adult that relate to four categories: biological, legal, social, and psychological (Knowles, Holton, & Swanson, 2005). Using any of those definitions is difficult as they are all intertwined and interrelated. There is no consensus on the definition of an adult learner, and this paper will adopt the definition provided by Lewin and Lundie (2016) and Mubayrik (2018). Adult learners are older than 25, have dependents, are financially independent, work, and possess life and career experience (Hardison, 2024).

Learning technology among adults at the tertiary level presents opportunities as well as challenges. Adult learners, according to Malcolm Knowles, learn and process information differently compared to younger learners. As such, there is a need to teach adults in a manner that addresses their needs, and as such, Knowles came up with the andragogy theory explaining how adults learn. In addition to bringing new opportunities, it also challenged learners' preconceived ideas, beliefs, and values about the effectiveness of technology (Sabri, Gani, Yadegaridehkordi, Eke, Shuib, 2022). In embracing learning technology, learners learned to accept the changes the technology brought, facing the challenges, such as Internet access, technical hurdles, and lack of knowledge (Chibuwe & Munoriyarwa, 2023), they met head-on, thus making their learning environment work for them (Nhengu, 2023). In learning technology, they developed new learning schemas that fit their situation (Sabri et al., 2022).

Motivations for adults to learn technology - Literature is awash with theories that explain adult motivation to learn in general and to learn technology in particular. Such theories include psychoanalytic theories, which are for understanding the inner drives; Maslow's hierarchy of needs, which is a ladder of human motivation; psychological theory, which focuses on the role of intrinsic and extrinsic motivation; and the achievement-motivation theory, which focuses on the drive to succeed (Kumar, 2023). Apart from these theories, research has shown that adults are motivated to learn technology for personal and professional growth, as well as to pursue aspirations, belong, compete, and achieve instrumental benefits (Leen & Lang, 2013). A study by Sogunro (2014) showed that adults are motivated to learn in higher education by the quality of instruction, quality of curriculum, relevance and pragmatism, interactive classrooms, effective management practices, progressive assessment and timely feedback, self-directedness, a conducive learning environment, and effective academic advising practices.

Some of the reasons why adults are motivated to learn are that they want to satisfy a personal interest, earn more money, maintain or establish meaningful social relationships or connections, serve others, and meet external expectations (Fasokun, Katahoire, & Oduaran, 2005). Acquiring practical skills in technology naturally enhances learners' employability and increases their chances of career advancement while at the same time enhancing their

pedagogical and technological skills and practices (Gamira, 2019). In having done so, learners would also have secured their professional futures. In addition to personal motivations, a study in Ghana showed that instructors also motivated adults to learn using various techniques (Salifu & Biney, 2023). As people have different personalities, learners are thereby motivated to learn in different ways and for different reasons (Gom, 2009). Tyler, De George-Walker, and Simic (2020) carried out a *questview* (integration of questionnaire items and semi-structured interview questions) study in Australia of 10 learners that showed that they had diverse motivations and continued to learn Information Communication Technology (ICT) because of a range of motivational processes that mattered to them. The study of Tyler et al. (2020) showed that adult technology learners faced challenges such as anxiety; however, their attitude was always positive as they regarded ICT as a personal utility tool.

Because technology is considered a personal utility tool for learners, they align themselves to fulfill specific career goals and enhance their skill sets. These personal aspirations and, to some extent, external factors help motivate learners to pursue a technologically oriented curriculum or course. Being aware of the socioeconomic landscape, especially in Zimbabwe, and the demand for technologically competent individuals in the job market, combined with the overarching institutional frameworks, creates a complex milieu that significantly shapes adults' pursuit of technology education.

Positive perceptions of learning technology by adults - Some learners had positive perceptions of learning technology or having technology integrated in class. Al-Labadi and Sant (2021) found that students considered that they understood learning material when technology was used in the classroom. Students believed that the use of technology in class helped them to be engaged in the learning process and have better grades (Al-Labadi & Sant, 2021). Not only were students satisfied with learning technology were students satisfied, but also some "expressed satisfaction with the education technology provided" (Sweeney, 2024: 6) by the institution. The study found that students saw the value of educational technology and incorporated it into university-wide learning to their benefit. Using technology aids students to understand some new and difficult concepts in different subjects (Sweeney, 2024). Students' acceptance of online teaching and learning (Sim, Sim, and Quah, 2021) meant that they embraced the use of technology. This acceptance of online learning and the use of technology also explains the students' enthusiasm and satisfaction (Sim et al., 2021). To the students, technology was viewed as a valuable tool in the teaching and learning process (Azad, 2023). The use of technology also meant that university students improved their communication skills (Ambiyar, Nawim, Rizal, Sukardi, Verawardina, Rahim, Yaacob, Baharum, & Shahron, 2023), and this was a plus for them.

Challenges faced by learners in learning technology - The experiences of adults in learning technology seem somewhat varied due to personalities, interests, and access to resources. Depending on whether they are young or older adults, learners tend to learn and acquire technological skills differently from young traditional students. Regarding learning and using technology, some adults are regarded as digital immigrants who have to learn and sacrifice their time to become acquainted with emerging technologies (Solomon & Schrum, 2007). In this manner, some of them do face challenges that may affect their learning of technology. World over, navigating the landscape of technology learning presents substantial challenges for learners (Rott & Schmidt-Hertha, 2024). The challenges may vary from country to country, region to region, and some are related to personalities. Literature is awash with challenges related to access to technological tools, lack of reliable Internet and technological gadgets, and lack of technical support (Baharudin, Murad, & Mat, 2013; Kapinga & Mugabe, 2014; Wang, Sainz, Rose, & Alfred, 2024).

Kara, Erdogdu, Kokoc, and Cagiltay (2019) carried out a comprehensive study on the challenges faced by learners in online distance education and came up with various challenges that they categorized as internal, external, and program-related challenges. The literature review highlighted internal challenges as those that related to management, learning, and technical; external challenges included those that were job-related and domestic; program-related challenges comprised tutor-related and institutional ones (Kara et al., 2019). However, the authors found that these challenges varied based on gender, age, the context in which they studied, and the knowledge and skills of the learners. The challenges experienced by learners, not necessarily in learning technology, relate to

technology use (Wang et al., 2024), social isolation, family responsibility, and communication (Kapinga & Mugabe, 2014). Student technology users experienced social isolation and reported higher levels of poor mental well-being (Sahito, Sahito, & Kerio, 2024). In addition, in the same study, the researchers found that there was a relationship between social isolation and mental health, and lower academic performance.

The learners regarded communication as a challenge because they did not receive timely feedback from their lecturers, which caused concern and anxiety among them (Baharudin et al., 2013). Apart from feedback issues, some studies found that students complained about the delivery speed of teaching and learning, which they regarded as fast (Ambiyar et al., 2023; Sim et al., 2021). Learners enrolled in distance learning did not have the necessary technological skills (Kapinga & Mugabe, 2014), which led them to be skeptical and fearful of using technology (Harper, Wellman, & Quan-Haase, 2020; Sweeney, 2024). The fear can also be expressed in learning technology, failing the course, fear of being isolated, and having lower grades (Baharudin et al., 2013). Balancing school work and other commitments was a challenge for the learners as they still had to learn while at the same time taking care of the family and also going to work (Baharudin et al., 2013; Smith, 2023; Stevens, 2023).

The issue of finances is also a challenge experienced by learners enrolled in post-graduate study (Baharudin et al., 2013). The challenge with finance stems from the fact that learners, although working, had other responsibilities like looking after their families, and at the same time expected to pay their fees. A study done by Chirume and Kaseke (2020) at a local university concerning migration from the traditional classroom to online learning in the face of COVID-19 found that students considered a lack of social presence as a challenge. This challenge also led to challenges of learners developing feelings of social isolation, which later manifested in their overall life, leading to increased stress and depression (Harper et al., 2020).

The Purpose of the Study - The purpose of this study is to explore how learners navigate technology learning within the framework of a private university in Zimbabwe, where both the benefits and challenges present unique circumstances. The learning of technology as a course by university learners has the potential to enhance learning outcomes, yet it also poses questions about accessibility, instructional design, and learner engagement. By exploring learners' lived experiences in learning technology, the purpose of this study is also to shed light on their perceptions and worldviews of the overall impact of technology on their educational journeys. Exploring learners' experiences in learning technology, valuable insights into the complexities and opportunities of teaching and learning technology by adults can be drawn and addressed. The study sought to answer the following research questions:

1. What are the lived experiences, worldviews, and perceptions of adult learners in learning technology?
2. What are the opportunities and challenges adult learners experienced while learning a technology course, and how have they dealt with these?

2. Methodology

Research Design - This study used a cross-sectional survey design in which I simultaneously assessed the exposures and outcomes of learners in the learning of technology courses. I used open-ended surveys to gather data and generated lengthy responses (Fischer, 2021). Surveys are typically conducted to gather information that reflects learners' opinions, beliefs, attitudes, and views that cannot be observed directly. The questions in the survey were intended to gather respondents' views, experiences, and opinions. I collected data using a survey with a representative sample of respondents who completed the technology course.

Participants - The participants consisted of one instructor/lecturer and learners (n =34) selected from a class of 51 adults who completed the technology course. Of the 51 learners, nine dropped out of the class and failed to finish the course for various reasons. Two learners said they chose to drop the course because of pressure at work and family commitments; three faced financial challenges; three were 'disoriented' with the course; and one did not provide a reason. Of the 42 remaining participants, 34 agreed to participate in the survey, including two who

had failed to complete the program. All learners were holders of a first degree, and most of them (30) were teachers. The two men were practicing their teaching outside Zimbabwe. For privacy and anonymity, pseudonyms were used throughout this paper.

Table 1
Demographic characteristics of participants (n=34)

Demographic Variable		Total Enrolled **(51)**	Completed the Course **(42)**	Participated in the Study **(34)**	Dropped the Course **(9)**
Gender	Male	17 (33%)	13 (31%)	11 (32%)	4 (44%)
	Female	34 (67%)	29 (69%)	23 (68%)	5 (56%)
Age	25-29	18 (35%)	17 (40%)	15 (44%)	1 (11%)
	30-34	16 (31%)	10 (24%)	8 (23%)	6 (67%)
	35-39	9 (18%)	7 (17%)	6 (18%)	2 (22%)
	40-44	5 (10%)	5 (12%)	3 (9%)	
	+45	3 (6%)	3 (7%)	2 (6%)	
Education	Bachelor	35 (68%)	30 (71%)	25 (73%)	5 (56%)
	Master	6 (12%)	6 (14%)	4 (12%)	
	Ph.D.	2 (4%)	2 (5%)	1 (3%)	
	Not specified	8 (16%)	4 (10%)	4 (12%)	4 (44%)
Occupation	School Teacher	34 (66%)	29 (69%)	28 (82%)	5 (56%)
	University lecturer	2 (4%)	2 (5%)	1 (3%)	
	Priest	5 (10%)	5 (12%)		
	Religious nun	2 (4%)	2 (5%)	1 (3%)	
	Not specified	8 (16%)	4 (9%)	4 (12%)	4 (44%)

Table 2
Demographic Characteristics of the Instructor

Name	Age	Gender	Year joined the university	Years taught	Qualification	Causes taught
Mike	48	Male	2020	5	Ph.D.	Educational technology Education foundational courses

Data Collection - A cross-sectional survey was used in this study to collect data. The information collected was from a "probability sample selected from a tightly defined population" (Postlethwaite, 2005:34), and in this study, the population comprised learners who had completed a technology course. The goal of the course was to equip learners with skills to use technology tools to teach high school students. The course was entirely online, and each learner had their own computer. The learners completed the survey during their time and sent it through WhatsApp and email. The researcher explained the nature and purpose of the survey and invited respondents to participate. The success of this survey research depended on how closely the answers to the survey questions matched the respondents' actual perceptions and actions. The survey comprised 10 open-ended and eight closed-response questions. Some of the survey items included the following:

- What are your general thoughts about learning technology as an adult learner?
- Outline four things that you either liked or disliked about learning technology.
- Do you own an Internet-enabled device?
- What do you think needs to be done to make learning about technology a better experience?

After the analysis of survey data, the researcher then used the responses to draft questions to interview the instructor/lecturer. This process ensured the completeness of data collection in a process primed for triangulation.

Data Analysis - Simultaneous data collection and analysis were employed to analyze the data for this research, primarily to reduce the volume of information while identifying significant patterns. As the survey was coming in,

data was being analyzed, and the researcher did not wait to receive all the responses. This process also helped the researcher to avoid the risk of having overwhelming data, repetition patterns, and thereby coming up with an unfocused analysis. For the qualitative survey part, the researcher analyzed the data using an analytic qualitative data analysis procedure that followed the steps below:

- Organizing the data – spent some time writing important data for each open-ended research question, and at the same time, cleaning up what the researcher considered unmanageable or too overwhelming for the research.
- Immersion in the data – this entailed reading the survey responses, making comments, and participant quotations; immersing myself in the data to understand it.
- Generating categories and themes – while making sense of the data, categories were generated, which then culminated in the production of themes to explain the perceptions and worldviews of the participants in learning technology
- Coding the data – I coded the data using actual participant words, and as a researcher, I managed to see that the coded data was clustered together with worldviews concomitantly appearing
- Offering interpretations through analytic memos – Individual analysis of each open-ended question allowed the researcher to write analytic memos, questioning his thoughts, and data being analyzed to afford creativity, rather than having a mundane and monotonic process.
- Searching for alternative understandings – this was a necessary step to take, as I needed to have an open mind to data, questioning the data, to understand a subtle "saying" that may change the meaning of the participant's worldview.
- Writing the report or other format for presenting the study – The choice was to present the findings of the study using themes generated from the process, rather than focusing on each survey research question.

The data analysis process generated themes, some of which cut across the survey research's open-ended questions. Having themes to answer the research questions was profound, as the specific worldviews of the participants were presented. For the instructor/lecturer, the audiotaped interviews were transcribed, and coding was done to generate categories and later themes. These were compared to themes developed from the surveyed learners. A hand analysis of data was done because the data analyzed comprised a small database (Creswell, 2012).

3. Results

The results revealed that adult students had different views and perceptions after participating in the technology class. The views and perceptions were categorized into six themes: disorientation, comfortable, collaboration, work-school-life balance, benefits and challenges, and future prospects. The findings could be classified according to the stages of Gladhart's model (Gladhart, 2001, as cited by Toledo, 2005) of the Adoption Rubric for Computer Technology Integration of entry, adoption, adaptation, appropriation, and invention. I chose themes instead of using Gladhart's model stages because themes captured the views, perceptions, and experiences of adult teachers, while the model did not proffer wholesome findings of the participants. Out of 34 participant learners, only quotes from 16 participants were used, and pseudonyms were used to identify them. The findings from the instructor were presented separately, and they helped explain some of the views expressed by learners.

Disorientation - The dominant theme that emerged from the study concerns the challenges that learners face during the entry stage. The entry stage is when learners experience difficulty and exhibit fear regarding the acceptance of new technologies. During this stage, most learners felt confused and disoriented and felt that they should never have joined the program in the first place. Most learners shared that their entry stage in the learning

of a technology class was confusing and that they even engaged their relatives, spouses, and friends to inform them that they were thinking of quitting their studies. Others even tried to get a refund in terms of their fees, but when they were told that it was not possible, that is when they decided to continue learning. These learners stated that the entry stage was scary, painful, confusing, frustrating, challenging, perplexing, and a nightmare. Some believed that they had joined the wrong program or that they had made the wrong decision. Some learners had this to say:

> *The entry stage was so hard for me, and I wanted to quit the course. I was confused and wished I could get something better than this. I thought I had made the wrong decision - Flo*

> *The pressure was too much and I had sleepless nights … balancing school and family - Brenda*

While some learners considered themselves disoriented at the entry stage, others felt that they were still disoriented even during the adoption stage. Learners stated that they struggled to master technologies at the most rudimentary levels. The learners would start to experiment with electronic applications that closely imitate existing classroom activities, such as drill and practice, and tutorial environments. Some learners felt that they never shook off disorientation during the adoption stage. After realizing that they could not quit the program, they continued with their studies, but in a disorientation state. The comments made by some learners are:

> *This adoption stage wasn't an easy task for me. This technology could have killed me before my time, but there was no way I was going to quit this course; all that I needed was to soldier on, since in this era we can't do without this technology – Nelia.*

> *The adoption stage was a nightmare, frustrating, and challenging at times because the technology refused to cooperate with me, but I refused to give up. – Melody.*

Although some learners felt disoriented while learning the technology course, others considered that they had already failed the course even before completing and taking the technology exam. One adult learner, Charmaine, stated that she experienced swollen legs and headaches from sitting for long periods and doing projects online while learning the technology course. Lorraine stated that she failed to cope while learning the technology course as she was confused, lost her appetite, and lost weight due to pressure.

Comfortable - Another theme from the study is that learners stated they were comfortable when learning a technology course. These learners who stated they were comfortable said they were excited to learn new teaching tools. They argued that they loved exploring and learning. This eagerness to learn drove them to like the technology course because they foresaw the future benefits of learning technology. In addition, some of them received assistance from their children and relatives.

> *I was very excited and loved exploring and learning new things, and giving up wasn't an option. My daughter is also techno-savvy, so she would assist where necessary. - Joane*

Other learners stated that they were ready to learn the course and had come prepared. The advantage of these learners is that they asked other learners who had already completed the course, so they knew what to expect. These learners stated that they were excited to complete the course and were full of enthusiasm. These learners said that the technology course made them explore, and as they love to experiment, the course came at the right time.

> *The previous group had tried to give a heads up that this course is by far the hardest, but they said no matter what, we will make it, so that gave me hope too - Melody*

> *My entry stage was exciting, with less confusion, and all went smoothly. My adaptation went well, though characterized by too much pressure, and schooling whilst at work – Abel*

Work-School-Life Balance - Another theme that emerged from the study concerned balancing work/life and

school. Most of the learners acknowledged that they were failing to balance work and life with the pressure of going to school. The learners said that they worked and had families while going to school to learn. The learners failed to give preference to the other (work or school) because they had to keep on going to work to provide for their families, while at the same time going to school. To them, one had to suffer, and it so happened that the school suffered, as students failed to submit work assigned on time. One of the learners reminisced:

> *I'm even responding late, under pressure from work, and having to balance school, my social life, and other basic activities. But I know joy comes in the morning, so I keep striving. - Sandra*

Some of the learners in this study reiterated that they were married and had kids to take care of. The times they were doing the technology course, learners argued that they failed to provide love and support to their spouses and children. The learners reiterated that they had bad experiences, and their relationship with their loved ones was negatively affected.

> *After school, at home, I had to help my children with homework and cook. Going to bed was stressful because I had to fulfill my marital duties. I never rested - Dorothy*

Collaboration - Learners in this study gave a lot of information about collaborating with their peers either online or physically. However, there were mixed views on this issue as the adult students either found collaborating with their peers beneficial or wasteful. Some of the learners thanked the lecturer who taught them for encouraging them to collaborate across genders and reach out to those whom they did not even know before. Some learners reiterated that they had positive collaboration experiences and, hence, benefited greatly from their colleagues when they were asked to collaborate online using Google Docs. The comment by Charmaine helps to explain this point.

> *In my case, I did learn from my partner. I tried a tutorial on YouTube, but I did not understand the other part. My partner explained everything before and during the collaboration session. It became more interesting as we proceeded.*

The learners also said that their colleagues helped them a lot when they faced challenges in doing work assigned by their lecturer. The learners said that they found the lecturer's teaching method of not providing answers directly but asking students to collaborate and research confusing and challenging. Some of them commented that they even tried following tutorials on YouTube on how to do the work without any success. This led them to engage their peers, to whom they commented that the engagement was beneficial and fruitful. The following quotes help explain this position.

> *On collaboration, I learned from my partner because she was guiding me on how to work on the case study assignment, which helped generate points for my part. It was quite helpful because it helped us to break through the distance barrier, and we worked as if we were together [physically]. - Dorothy*

As the learners commented on the collaboration, some of the learners developed friendships with the colleagues with whom they collaborated. They ended up visiting each other and doing things together beyond schoolwork. They even thanked the lecturer for allowing them to work in pairs, as this led them to develop relationships beyond the classroom.

> *Most of all, I gained a friend in my partner, and we went beyond the given projects to other courses as well - Ingrid.*

Some learners labeled their colleagues whom they worked with as "*great support systems*" who were always available to offer help. In fact, they said their colleagues pushed them to their limits, and the projects undertaken by their colleagues inspired them to do better. Their catchphrase was "*If they can do it, I can also do it.*" However, some learners had negative collaborative experiences, and they felt that their collaboration was a nightmare and did not benefit much. According to these learners, neither of them was not tech savvy, and no one was able to help

the others. They then reached out to others with whom they were not collaborating for guidance, and this helped them learn. The inability to help each other affected their self-esteem and confidence in learning the technology. Those who felt that they did not benefit from collaborating with their colleagues expressed the following:

> *My collaboration with my partner was full of confusion, as neither of us knew anything about collaborating online using Google Docs - Aletha.*

> *Hmmm, as for my partner and me, it was like two people who are blind leading each other, as we didn't know how to go about it and had to ask others from other groups who assisted us – Brenda*

This finding was interesting because both Aletha and Brenda were partners in doing the projects, and their statements corroborated. This finding is evidence enough that the results obtained from the participants provided a corroborated explanation that may help further explain and answer the research question at hand.

Benefits and Challenges - The fifth theme that emerged from the study focused on the benefits and challenges learners considered that they faced. Some learners articulated the benefits of their course while others benefited from some aspects of the technology to address real-life issues. The learners stated that, besides learning about manipulating technology and creating projects for their benefit, they learned how to collaborate with others while appreciating the value of having clear, concise, and effective communication with others. Other learners also stated that they learned how to be patient when faced with daunting challenges.

> *I learned to be patient a little more as we come from different circumstances like network and timing, but more so, I also learned to be supportive as my partner fell sick - Ingrid*

> *In the Google Docs collaboration, which I participated in as part of my project for this course, I benefited by sharing ideas and improving on document presentation - Abel*

The challenges learners faced most had to do with network issues and electricity problems that deeply affected their learning of technology. Some learners stated that they were working as teachers in remote rural areas where Internet connection was a challenge. Some challenges also had to do with uncooperating colleagues who did not participate in a particular project. They complained that they ended up doing a collaborative project on their own while their colleague "whined" about network issues, pressure at work, family responsibilities, or even just being too tired to do work.

> *Imagine working on a project yourself when you are supposed to work with your partner. The reasons they gave were not convincing enough, and I felt that they were lying - Enesia*

Future Prospects - Finally, yet importantly, learners shared their plans after completing the technology course. Apart from implementing what they had learned in their teaching and workplaces, some of the learners believed that they could use the skills they acquired by undertaking a technology course to make some money. The learners, most of whom are qualified teachers, said they will use the acquired knowledge in technology to better deliver their lessons to their students. One of the learners said:

> *I was inspired by my lecturer. The way he knows technology. I told myself I needed to follow his teaching very well. I can see my future through this module - Lorraine*

One of the most interesting findings from the study was one student who later called me [as the researcher] and said she had interesting news to share. She came to my office and shared with me that she is making money through a technology course. The student shared that during the first month, she made almost US$500 by creating curriculum vitae, resumes, posters, brochures, and websites for people who did not know how to make them. The adult learner shared at length about how she found the technology course valuable to her career and income prospects.

> *Did I tell you that I was earning money using this App [Name of App retracted]? I make CVs,*

> *cover letters, and posters for people, especially in Dubai, the UK, and South Africa. People flock to Dubai for job hunting, and most of them do not know how to write a CV. I do that at 15usd ...cover letter 8 US, and they pay me while I am in Zim. I also use Word to design CVs and sometimes posters for business because some people are doing small businesses in Dubai, and they need posters to advertise their services - Rebecca*

In addition, some of the students expressed gratitude to their instructor for guiding them and opening doors for them to technological tools that they did not even dream of using. One of the learners expressed her intentions to join the teaching profession, emulating the instructor's teaching style, exuding confidence, patience with students, encouragement, giving constructive feedback, and pushing students to excel beyond their limits. Through learning technology, some of the learners felt that they had been equipped with life-changing skills that would make them better teachers. *Nelia* reminisced;

> *His [the instructor's] dedication, expertise, and passion for teaching have been instrumental in shaping me into a confident and competent educator. His unwavering support and inspiration, patience, encouragement, and constructive feedback helped me grow both technically and pedagogically. I've gained the knowledge, skills, and confidence to embark on my teaching career. The instructor's influence has instilled in me a passion for teaching and a commitment to excellence.*

Some said that they are going to further their studies in a higher technology qualification because, according to them, technology is here to stay. Some learners even contemplated leaving their teaching jobs and embarking on a career in a technology-related field.

Mike's (The Instructor) Perceptions and Worldviews - Mike's philosophy, as he saw it, centres on empowering learners by guiding them to learn. He argued that his presence in the classroom is not to 'dish out' answers to students, but to facilitate learning. In facilitating learning, *Mike* said his role is to create a conducive environment for learning and guide them so that they produce an output they own, and not as dictated by the instructor. In that way, he believed that he was not a lecturer, but an instructor. When asked about the teaching strategy the learners complained of (i.e., not providing answers directly but asking them to collaborate and research) as confusing and challenging, he had this to say:

> *They are used to secondary education when all things are given to them on a silver platter … this is tertiary education, and learners must provide answers. We as university professors, must instill a culture of facilitating learning in these students. If I give you answers, then what is your role as a student?*

Unlike other courses offered to learners, Mike argued that he believed his course was one of the few where self-paced learning and learning choice mode were available. He stated that adults, who preferred to learn wholly online, face-to-face, or both, were free to do so.

Mike also stated that his teaching style and methods were meant to empower students such that they can make their own choices. Some learners explained that they appreciated the teaching strategy as it empowered them, as articulated by *Rebecca,* who later called the researcher, explaining that she is making a lot of money through the technology course. When Mike was informed about this, he reminisced:

> *That is what I am talking about. You see, when you facilitate learning and give autonomy to students, you are empowering them. That student has found value in the strategy, not the value of the instructor. That student obviously transformed his/her learning into something meaningful. Talk of transformative education.*

Mike was also of the view that as a lecturer, there is a need to continuously learn technology as it is changing every day. For the challenges, *Mike* complained of the large class size, as according to him, 51 students were just

too many to address individual learning needs.

4. Discussion

The study found that some students were comfortable with learning technology as they loved to explore and experiment. For them, they came to learn technology with a positive attitude, and this was an important aspect that learners had when learning technology. Liu and Joines (2020) and Stemberger and Konrad (2021) found that learners who were proficient in technology had a positive attitude toward learning technology compared to the novice group. This attitude, according to the researchers, tended to affect how they learn technology and appreciate it. The study also found that learners in the technology class either collaborated or learned technology alone. Those who collaborated either benefited a lot from their colleagues, while others felt that they did not benefit or that they ended up doing the work on their own. Kambouri, Mellar, and Logan (2006) found that collaboration among learners worked to the benefit of the lecturer who managed to teach successfully. In terms of boosting confidence, this study found that some students gained confidence and felt challenged after witnessing their colleagues developing and displaying their newly gained ICT skills. The argument was that if my classmate could do it, I could do better. This finding is corroborated by the findings of Kambouri et al. (2006), who stated that, to the students, collaborative learning was effective for learners to gain confidence and speaking skills.

In terms of gaining ICT skills, those who learned alone showed better understanding of ICT skills as compared to those who collaborated (Kambouri et al., 2006). This might also be the reason why some learners in this current study who worked in pairs did not find any benefit. Pelletier (2005) found that student-to-student interaction using technology was limited and had its challenges. Learners who learned alone did so using instructional materials, trial and error, and watching YouTube tutorials (Liu & Joines, 2020). This current study also found that learners used YouTube to learn some concepts in addition to the material the lecturer gave them. The study also found that some learners found help and support from colleagues, friends, family members, including their children who were tech-savvy. They reached out to their colleagues in person or via WhatsApp. Liu and Joines (2020), who stated that learners got help from family and friends when learning alone, corroborate this finding. Asking for help from a younger generation, whether family or friends, was a key component for adults in learning technology (Liu & Joines, 2020). Those who faced challenges felt challenged that if their colleagues could do it, then they had to try harder and grasp the concepts.

Their lecturer also played an important part through encouragement, and some felt inspired by his teaching methods, while others regarded it as confusing. A study by Feng, Yee, Ng, and Law (2022) found that learners received support and technical assistance from family members, their lecturers, and their classmates via WhatsApp. Learners who learned the course were 51, and 9 dropped out due to various reasons that included pressure at work and family commitments; financial challenges; and being 'disoriented' with technology. While one student did not provide a reason for dropping out, Kambouri et al. (2006) are of the view that learners with lower levels of ICT confidence were likely to miss classes and would eventually drop out. Matswetu, Munakandafa, Munodawafa, and Mandoga (2013) add that learners faced financial problems and a lack of ICT skills and would quit the course due to failure to adopt coping mechanisms.

In terms of challenges, adults face challenges daily using technology, even at home, and not only in formal learning environments. This study found that learners faced challenges that had to do with connectivity issues, balancing work, life, school, electricity unavailability, and uncooperative team members when working on a collaborative project. The finding validates the findings by Kapinga and Mugabe (2014 and Yazdani-Darki, Rahemi, Adib-Hajbaghery, and Izadi-Avanji (2020), who identified a host of challenges raised by learners when learning and using technology. Challenges they identified included limited technological skill, lack of time and opportunities for learning, balancing life, work, and learning, and limited feedback from others [colleagues]. Concerning the instructor, the main challenge he said he faced was large class sizes that made it difficult to instruct and evaluate learners individually. This finding supports the finding by Chosani, Chinyamunjiko, Nyakurimwa, Bhibhi, Masinire, and Manhiwa (2024) who found that large class sizes are a hindrance to effective teaching of

learners.

Most of the participants of this study considered themselves beginners in using technology and were at the entry stage of Gladhart's model of the Adoption Rubric for Computer Technology Integration model. According to these learners, they did not have the requisite knowledge of technology. The finding of this study is that learners during the beginner or entry stage of learning technology were disoriented. This finding supports the findings of Feng et al. (2022), who found that most of the participants regarded themselves as beginners who did not have the requisite technological knowledge and failed to navigate online learning settings.

Another interesting finding from this study points out the possible opportunities and future prospects of using technology in the future or beyond the classroom. Some learners believed that, although they felt disoriented at first, they appreciated that learning technology would help them have better economic opportunities. This finding resonates with Ambiyar et al's (2023) finding that online learning was beneficial and enriching to learners. Some learners argued that technology would place them in a better position when looking for employment, as the economy in the country was going digital. This finding supports the findings by Feng et al. (2022), who found that learners had a positive attitude toward their future use of technology and argued that with time, technological devices will become more user-friendly. They understood the value of using technology and having online learning. The finding on the value of technology is also corroborated by Ileto (2019) who found that the use of technology in the classroom improves student learning and achievement.

Findings from the interview with the instructor showed that he expected learners to be autonomous, while the instructor facilitated learning, guiding and empowering them at the same time. The instructor was against providing answers, much to the disdain and dislike of learners. This finding supports the findings by Jarvis (2018), who provided three good teaching methods educators must pay attention to when teaching learners. The three concepts are facilitating learning, encouraging students to be autonomous and independent, and the teaching process must empower learners (Jarvis, 2018).

The learners felt that their instructor was knowledgeable and very good at teaching them technology. The learners in the study said that they felt that their instructor was a tech-savvy person who equipped them with the technological skills necessary for the job market. This finding contrasts with that of Ceylan and Karagol (2023), who found that although technology trainers had a positive attitude toward the use of technology and recognized its value, they faced challenges in utilizing it. The trainers saw value in improving themselves in the use of technology (Ceylan and Karagol, 2023), which is also the case with the learners in this study. The instructors must take time to learn and upgrade themselves technologically as newer tools are being discovered everyday (Ching & Roberts, 2020).

5. Conclusions and Recommendations

Learners provided many views, experiences, and thought-provoking, subtle statements in explaining their opinions on learning technology. A majority of the learners experienced challenges when starting the course, but soon adapted to the process. Although some dropped out of the course, those who remained expressed the willingness to learn and saw the value of having technological skills in the current prevailing economic status of the country. What we learn is that adults need to persevere in learning technology so that they are not left behind.

Although some adults used YouTube and other media to learn, there is value in collaboration. Consulting others beyond the class was of valuable importance and learning technology. It is crucial to engage others, especially the tech-savvy young adults, including the experts in learning technology. Instructors of technology must learn the strategies and ways of teaching learners, engaging them, and helping them understand the concepts according to their level of understanding. This study found many praises and few complaints about the instructor, and although this is a positive finding, I may consider it as a limitation since it was only one instructor. As a recommendation, it might be prudent to have more than one instructor for the study. This is because the study was limited to a specific course, lecturer, institution, and mode of instruction. The recommendation might be to have

more than one university for the study. Another recommendation is to have a manageable class size, as the lecturer complained of the large class size.

In terms of implications, it is clear that adults struggle with technology learning that may lead to high drop outs and as such introductory training in technology is crucial to enable adult learners to navigate technology smoothly. Instructors must vary their teaching strategies that aims to empower adults learning technology. In doing so, collaboration is key. Adult learners have unique needs and practitioners must be able to adopt flexible approaches that are designed to address individual learning differences. Having technology knowhow is crucial to adult learners as they may end up with the technical skill to fit in different work places beyond the classroom. Universities should offer preparatory technology training for learners to reduce initial disorientation and dropout rates. In the same vein, learners must be prepared to be part of the educational technological revolution and embrace it. Lecturers must listen, embrace the worldviews and backgrounds of learners, and learn to adjust their methodologies to the benefit of all parties concerned.

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