

As They See it: Adult Literacy Facilitators' Views on the Digitalization and Integration of Technology for Learning

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ABSTRACT

Various projects and programmes have been undertaken by different developing nations by way of research and practice in the past years, to improve the literacy rate. However, the fundamental problems and the global statistics on literacy continue to be worrisome in most African nations, inclusive of South Africa. In a bid to address the challenge of youth and adult illiteracy in this 21st Century, the adoption of Information Communication and Technologies (ICTs) by adult facilitators, is a catalyst in reaching the goal of sustainable social and economic national development. Therefore, this study aims to explore the views of adult literacy facilitators on digitising and integrating information communication technology into adult literacy programmes. A qualitative method was employed by the study, with the use of semi-structured interviews with 10 purposively and conveniently selected participants across the 10 literacy centres in KwaZulu-Natal province of South Africa. The collected data was thematically analysed to generate findings for the study. Findings revealed that adult learners have been neglected in the use of ICT for learning. Conversely, literacy centres lack ICT facilities for teaching and learning activities. This consequently impacts the learning abilities of adult learners negatively. The study, therefore, recommends that adult literacy centres should be equipped with relevant ICT gadgets to enhance adult literacy programmes. Also, a system approach where every individual and all adult literacy education stakeholders should be involved in the implementation process should be embraced.

Keywords: Digitalizing, Integrating, Adult Literacy, Adult education, Adult facilitator, ICTs,

INTRODUCTION

Teachers who are adult facilitators in various adult learning centres still teach via the traditional methods in rural, semi-urban and urban areas of South Africa (Akintolu, 2019). This has been the situation over the years in most African countries. This research aims at exploring effective and alternative ways for adult facilitators in engaging adult learners. The researcher sees this as an avenue to leverage the proliferation of technology on the African continent. Furthermore, the researcher seeks to investigate the perception of adult facilitators in using technology in the delivery of content. According to Wagner (2014), in recent years the penetration of low-cost digital and mobile devices has led to a strong expansion of various sections such as banking, Small and Medium Scale Enterprises, and Agriculture among others. The rapid expansion and growth of Information Communication and Technology (ICT) has already created previously unimaginable chances for expanding access to and the reach of education (Majumdar, 2015). Given this background, it is important that attention is shifted to how ICTs can contribute to increasing access to literacy and improving the quality of literacy (Dighe, 2008; Akintolu, Adedore and Nzima, 2019). Furthermore, a rapid transformation is taking place worldwide for over decades and now

affecting developing countries in different aspects of their lives- economic, social, political and cultural. The integration of ICTs has brought about huge changes in our lives. However, third-world countries continue to experience undiffused access to news and information more than ever before (Vickers & Ziebarth, 2019; Caswell, et al 2020).

Thus, integrating technology into adult literacy programmes will capacitate adult facilitators who serve as the umpire in any literacy learning and must be seen as a collaborator. Currie (2001); Sabo, (2019) & Widodo & Susila (2021) articulated the role of a facilitator as that of a proactive mediator and facilitator of learning.

Rationale for the study

Over the years, South Africa has engaged in several initiatives such as KhaRiGude, Masfundisani etc. KhariGude (KRG) in the Venda Language means “Let Us Read” (McKay, 2016) while Masfundisani in the Zulu language means “let's teach each other”. It is noteworthy that none of these initiatives has considered the use of information communication and technology in their approaches. KRG is supposed to make it possible for all adult citizens to have access to basic education in the South African language of their choice, according to their Constitutional rights. Hence, the purpose of the campaign is to give participants basic literacy and numeracy skills in order for them to be relevant in the social and economic activities of the country.

In addition, various studies have established that the proliferation of mobile technology in Africa has made communication easy for both young and adults. According to a report released by the (Independent Communications Authority of South Africa (ICASA), 2020), South Africa had a smartphone penetration of 81.7% in 2018 compared to the 43.5% in 2016. Hence, adult learners' access to technology has increased especially in mobile technology.

The thrust of this study is to explore the views of adult literacy facilitators on the digitization and integration of information communication technology into adult literacy programmes in South Africa. The study was guided by the following sub objectives:

To explore facilitators' views of the use of technology for learning in an adult literacy programme.

To ascertain the kind of ICT that can aid the acquisition of basic and functional literacy skills, and how best it can be introduced to support and motivate learners to learn.

To establish various challenges that can face with the use of technology in an adult literacy programme.

LITERATURE REVIEW

Digitalisation and Integration of Technology for learning in an adult literacy programme

According to Dighe (2008), ICTs are frequently connected to advanced technology tools like software and computers, but ICTs also comprise more conventional technologies such as television, radio and both fixed and mobile technology. Recently, technology has turned into a fundamental part of human undertaking (Roztocki, Soja & Weistroffer, 2019; Wolff, 2021). Hence, there is a need to incorporate technology into adult literacy learning and training. Consequently, various literature has postulated and given more credence to the need for technology integration into adult learning and education, for example, cell phones, web-based, mobile applications and internet platforms among others (Adelore & Akintolu, 2016; Wagner 2014). However, utilising technology to prepare adult students will require easy-to-use platforms, funds and prepared adult facilitators (Adelore & Akintolu, 2016; Akintolu, Adelore & Nzima, 2019). Over the years, studies have highlighted that adult literacy programmes as part of an integral part

of educational policy and practice have been generally neglected by policymakers in most developing countries (Dighe, 2008; Akintolu, Uleanya and Letseka, 2022). This is particularly so with regard to South Africa as evidenced by Akintolu and Uleanya (2021), that the commitment and investment in adult literacy programmes do not correspond with the enormous challenges the country faces.

Wagner (2014) opines that there are important benefits in using technology for the delivery of andragogical content and for the new dimension of what it takes to be literate in a world profoundly transformed by technology. He further stresses that technology in the future may advance and provide new tools to assist in achieving important objectives such as enhancing literacy and education, reducing poverty, and fostering economic prosperity. ICTs have made a significant contribution to the attainment of adolescent and adult literacy with the purpose of learning anytime and anywhere with careful attention, according to a report published by UNESCO (2018). Additionally, it improves societal involvement and employability.

Dighe (2008) in a report claims that one major challenge to the use of ICT in adult literacy programmes, is in relation to the perception of most developing countries that see ICT as add-ons to the education system, and as such little attention is given to ICT usage either to complement or supplement the conventional education delivery system or learning processes. Hence, not too many adult teachers have been provided with the tools or are capacitated with training on how to integrate ICT into the teaching and learning process (Ghavifekr, Kunjappan, Ramasamy & Anthony, 2016). In another report edited by Kraut (2013) for UNESCO titled 'policy guidelines for mobile learning, which is a culmination of work carried out in different parts of the globe, UNESCO agrees that mobile technologies can expand and enrich educational opportunities for learners in diverse settings in a country like South Africa.

Mobile learning as a branch of ICT can involve either the use of mobile technology or in combination with other information and communication technology to enable learning anytime and anywhere. The UNESCO report stated that there is a growing body of research indicates that learners and educators worldwide are using common mobile devices, particularly mobile phones and more recently tablet computers, to access information and streamline the content to aid learning in a new and innovative way.vative approach (Kraut, 2013). The policy recommends that all policymakers should adopt and tailor this to the unique need and the reality of the local context. However, most countries do not use ICTs in literacy programmes nor have they formulated policies for the integration of ICTs in adult literacy programmes (Akintolu & Uleanya, 2021).

Akintolu, Uleanya and Letseka (2022) agree that there is much greater use of ICTs, particularly in school education than the use of ICTs in community learning centres which are still limited.

Different types of technology integration for learning (basic and functional literacy)

Technologies used to create, transmit, store, share, and exchange information are collectively referred to as "information and communication technology."(UNESCO 2009). Technology such as television, radio, satellite system, computer, software and hardware network and telephones as well as the equipment and services associated with these technologies, such as electronic mail and videoconferencing.

Although several researchers have identified different types of technology that can be used in an adult literacy programme in order to have an andragogical learning experience. In India, Dighe and Reddi (2006), Ghosh (2006) recorded the three piloted projects which were titled "PREAL", "Khilti Kaliyan" and Chauraha, in the experiments using radio, video cassettes and television for

educational and instructional purposes, with the main aim of teaching literacy to adults, targeting adult women.

In the same vein, a study carried out by Akintolu and Adelore (2019) titled ‘the attitude of adult learners using mobile technology for adult literacy programmes in Nigeria’. The experiment made use of mobile technology to ascertain adult learners’ academic achievement. Still underscoring the type of ICT used in promoting basic and functional literacy, Lineo and Poku (2016) emphasised in their study that the contemporary use of technology for teaching and learning is a concept that cannot be ignored by all stakeholders in adult learning spaces. Their study points to the fact that the most frequently used technology by adult facilitators and practitioners were email and mobile technology. The authors alluding to their respondents’ comments believe that technology tools can be used for academic purposes and simultaneously serve work-related purposes.

As reported by Farell (2004), a Literacy project sponsored by the Commonwealth of Learning as a pilot which took place in two locations Zambia and India, highlighted how ICT plays an enabling role in literacy programmes. The project engaged more with the use of computers and other ICTs equipment to train mostly the facilitators and staff at the different learning centres. Additionally, Adelore and Itasanmi (2016) adopted the use of two types of ICTs tools (Computer and mobile device) based learning platforms in an adult literacy programme.

How technology integration supports and motivates learners

Several studies have alluded to and highlighted best practices in the use of ICTs for adult literacy programmes, as well as other experiences around the world (Farell, 2004; Ghosh, 2006; Dighe, 2008; Wagner, 2014; Adelore & Akintolu, 2016; Akintolu and Uleanya, 2021). These studies have given credence to how ICTs can support to motivate adult learners Some of the features highlighted include:

ICTs can be used as a tool to help students learn to read and write. For instance, combining radio with printed course material can make literacy lessons more relevant to real-world situations and engaging for adult learners. Combining visual and audio stimulation can improve vocabulary and phrase construction skills more efficiently than visual stimulation alone, and it can also speed up information processing and memory. (Dighe, 2008 & Hanemann, 2014).

ICTs broadening access to literacy education: Access to literacy education may be denied or may be limited for a number of reasons such as distance to literacy centres, the busy schedule of adult learners, insufficient facilitators, lack of literacy materials and delay in receipt of feedback and results. In this sense, the use of technology such as Television, personal computer and mobile technology helps to broaden access to literacy among adult learners, while they learn anywhere and anytime (Snyder & Lo Bianco, 2005 & Hanemann, 2014)

Creating local content: ICTs, particularly mobile devices that are accessible to adult learners, can enable the rapid and efficient generation and distribution of culturally, linguistically, and socially appropriate learning content e.g., applications or software on mobile devices that can be used to modify literacy content or materials that have been developed in a different language to make it available in local languages and enable its relevancy to adult learners. This increase the motivation level of adult to learn more (Hanemann, 2014; Akintolu, Adelore & Nzima, 2019)

Professional development of facilitators: ICTs can help to reduce the workload of teachers, and supplement, and enhance their lessons to better motivate adult learners during andragogical delivery (Steiner & Mendelovitch, 2016 and Yermekkyzy, 2022).

Helps adult learners to cultivate a literacy-conducive environment and build a community of technologically enabled citizens (Dighe, 2008; Hanemann, 2014 & Adelore & Akintolu 2016)

Theoretical Framework

This study adopted the Technology Acceptance Model (TAM), which was propounded by Davis (1989). TAM which is also known as information systems theory is defined as the acceptability and usage of technology by any user. Davis claimed in TAM that user intention to use (acceptance of technology) and usage behaviour (actual use) of technology are predicted by the person's perspective of the particular technology's usefulness (benefit from using the technology) and ease of use to predict the level. Technology Acceptance Model is considered the most influential and commonly deployed theory for describing an individual's acceptance of information systems. In giving the proper position to technology acceptance, Lutho, Kallioja and Oittinen (2006) described technology acceptance as the way people perceive, adopt and use technology. Technology acceptance is a necessary requirement for the effective implementation of any Information Technology (IT) initiatives (Pinto and Mantel, 1990). Hence, use of technology in adult learning will be determined by the view and manner by which the adult facilitators perceive and adopt it. Venkatesh, Morris, Sykes and Ackerman (2004), Akintolu, Letseka, and Olugbara (2023) stress that accepting and interacting with technology is predominantly the initial decision of an individual. TAM considers an individual's intention to use a system will be verified by the perceived usefulness and perceived ease of use of that system (Naeini, 2012).

The study adopted the Technology Acceptance Model (TAM) because it hangs on the belief that acceptance is key in any technological initiative by an individual. Though it is stressed by the proponent of TAM that the actual system use is the end-point where people use the technology. However, the study only stance on the views of adult facilitators on the use of technology.

In relation to this study, if the views of the adult facilitators are positive to the acceptance of technology usefulness in any literacy programme, hence it will aid the ease of use and positively benefit from the technological initiative. The relevance of TAM to this present study resides in the fact that the benefit to be derived from the ease of use by any individual in accepting and using technology can be based on individual views in this case the view of the adult facilitators. This is directly related to the main research objective of exploring the views of adult literacy facilitators on the digitization and integration of information communication technology into adult literacy programmes in South Africa.

METHODOLOGY

Research design

The study adopted a qualitative research approach using a thematic analysis to explore facilitators' views on the digitalisation and integration of technology in adult literacy programmes. This approach enables the researchers to gather rich and in-depth data from the participants' lived experiences and perspectives (Creswell & Hirose, 2019). Qualitative research is a situated activity that makes the world (Denzin & Lincoln, 2011). It tends to be open-ended without any predetermined responses.

Research paradigm

The interpretive paradigm was adopted to understand facilitators' perspectives which were based on their diverse constructivist experiences in the learning environment (Vygotsky, 1978). A holistic understanding of the participants' diverse experiences and perspectives was qualitatively collected. According to Creswell (2013), a qualitative research approach starts with presumptions

and the application of an interpretive paradigm that guide the analysis of the research topic and objectives by addressing the meaning that certain people or groups assign to social or human problems.

Participants

A sample of 10 adult literacy facilitators was considered in the KwaZulu-Natal Province of South Africa. These facilitators are selected from various provincial literacy centres to serve as the participants for this study. The facilitators selected have a minimum of five years of classroom experience. The adult facilitators were recruited based on their willingness to participate and have similar characteristics of offering in-depth knowledge of the research objectives based on years of experience (Creswell, 2014).

Sampling method

A convenient sampling technique was used to select the participants from 10 different literacy centres in KwaZulu-Natal. The rationale for using convenient sampling for selection is based on the judgement of the researcher(s) involved. According to the submission of Black (2023) and observed by Akintolu and Letseka (2021), the subjects or groups selected as a sample were chosen by the decision of the researchers. According to Dornyei (2007), the convenient sampling technique is a kind of non-probability sampling where participants from the target population meet a specific requirement, such as geographical proximity, easy accessibility, willingness to participate, or availability at a given time are included for the purpose of the study. Etikan et al, (2016) opine that the main objective of convenience sampling is to collect information from participants who are easily accessible to the researchers.

Data collection

An in-depth interview was conducted to collect qualitative data from the selected adult facilitators with each of them at different literacy centres, done for a period of 8 weeks. The in-depth interview basically focused on the objectives as set out by the researcher to explore the perspective of the adult facilitators on the digitalization and integration of ICT in adult literacy programmes. The interview guide prepared by the researchers was in accordance with the research objectives, which aim to understand the perceptions of adult literacy teachers on the digitization and integration of information communication technology into adult literacy programmes. Given credence to the interview procedure explained by (Cohen et al., 2017), the interview guide contained specific questions about the digitalisation and integration of technology for learning in adult literacy programmes such as: can technology be used for learning in an adult literacy programme? do you think we can integrate technology into the adult literacy programme? How do you think it can be done? Which of the technology do you think can be useful for integration? And what are those things as challenges that can hinder integration? The interview session lasted between 45-60 minutes with each participant.

Ethical consideration

The University Research Ethics Committee granted the researchers permission to carry out the study in the KwaZulu-Natal province of South African. Additionally, permission to contact adult facilitators for the purpose of data collection was acquired from the Department of Education. The researchers informed the participants about the aim of the study with assistance from a research assistant. In line with the ethics procedure, the researchers handed over to each participant the

printed copy of the consent form written in the English language. The contents of the consent were read to the participants for approval before the interview session. Each participant completed and appended their signature to the consent form before the commencement of the interviews. The researchers assured the participants that the information received will not be disclosed to anyone but for research purposes only. UZREC 171110-030 PGD 2018/243 is the number on the ethics certificate.

Data analysis

Thematic analysis was adopted for the analysis of the collected data. The themes were generated from the coded materials. This was done after the information from the interview was transcribed from audio to text. In order to use the themes to define and address the research objectives, the researchers conducted a thematic analysis to find the recurrent themes in the interviews. Because of its adaptability, thematic analysis can be used to analyze a variety of data types; Thematic analysis is a technique that can be used to examine data from "conventional" face-to-face data gathering techniques like focus groups, interviews, and various types of qualitative surveys that use text data and diaries, among others. (Niland et al., 2014; Neville et al., 2015; Terry & Braun, 2016; Leeming et al., 2015b). Thematic analysis of the collected data was systematically carried out for findings and discussions (Braun & Clarke, 2006; Braun, Clarke & Weate, 2016). All ethical considerations were strictly adhered to in this study while assumed names have been used for excerpts from the participants for confidentiality (Kumar, 2014). Hence, adult facilitators were represented in pseudonyms as follows in table 1 below. The findings and discussion of themes generated are as follows:

Table 1: Number of participants

S/N	Participants	Gender	Qualification	Years of Experience
1	Alamu	M	ABET Diploma Certificate	5 Years
2	Sisi Tito	F	Bachelor of Education	5 Years
3	Jinadu	M	PhD	15 Years
4	Tontiri	F	Bachelor of Education	10 Years
5	Agbeke	F	ABET Diploma Certificate	5 Years
6	Labake	F	Bachelor of Education	10 Years
7	Suwebatu	F	ABET Diploma Certificate	6 Years
8	Bolatito	F	Bachelor of Education	7 Years
9	Asake	F	Bachelor of Education	10 Years
10	Arike	F	Master's in Education	15 Years

FINDINGS

The findings and discussions of the four themes from the interviews are presented in the section.

Theme 1: The importance of technology in an adult literacy programme

The importance of technology in adult literacy programmes is to enhance teaching and learning. The researchers sought to establish this with the participants. According to the participant's perspective, it is revealed that using technology can play a significant role in the content delivery and academic achievement of adult literacy learners. Participant expressed:

“Of course! Yes, I have seen it in computer studies, I think learners these days learn faster with computers, they understand better with them than the other method of teaching.” (Alamu)

Another participant expressed

“Yes, that can be very useful as well, because as you know in our days we are living in a digital world, so everything is done digital wise, so it will be very useful to integrate technology into adult learning” (Suwebatu)

Other expressions by the participant asserted that technology is necessary for learning in this generation:

“Yes, yes. Technology is very important. Without technology in this generation, there's nothing we can do. We use technology because sometimes they research, use the internet for researching information” (Sisi Tito)

In the above responses, the participants attested to the fact that using technology can be of great importance to the development of literacy programmes. Inferring from the participants, learners will learn faster when using technology in this 21st century. Also, there is a need to introduce technology because we are in the world of digitalisation. Hence, the participants in their responses alluded to the importance of digitalisation in adult literacy programmes.

Theme 2: Positive Perspective

In this theme, the participants' perspective is taken into consideration. The participants were positive in their responses during the interview and this reflect in the coding and eventually theme. Findings reveal that adult facilitators have a positive perspective regarding technology usage in an adult literacy programme. One of the participants highlighted in her view that technology usage will simplify the mode of learning:

“Yes, we can. It is possible because it can help to explain and display a lot of things to adult learners but we theorise a lot of things” (Tontiri)

Another participant also has a positive side to it:

“Yes, we can introduce it into an adult literacy program, but again it will take relearning as most of the learners are mature individuals and they have come from the pen and paper age” (Jinadu).

Similarly, Arike echoed that though facilitators have a role to encourage the adult learner:

Yes, we can integrate technology, though they are not learned. We can integrate the technology, we encourage them to use the internet because we give them an assignment, and we said they must go to the library (Arike).

The theme concluded it is possible to digitalise adult literacy programme content that will help to shield more practical understanding than the traditional mode of teaching. Due to the fact the that majority of the learners are digital migrants they may need encouragement to navigate the internet.

Theme 3: Type of technology

In integrating technology into adult literacy programmes, it has been identified that there are different type of technology hence, the participants highlighted a different kind of technology that can aid the acquisition of basic and functional literacy skills and how it can be introduced to support learners' motivation.

This participant expressed sentiment about the use of a computer for learning. In her word:

“Some of them don't have computers, they use their cell phones in researching information. So, if there can be more computers for them, it will be good because technology is important” (Sisi Tito)

Another participant expressed different type of ICT tools that can be integrated into adult literacy programme:

“Our learners can use maybe phones, computers with projectors can be used more often in classes” (Alamu)

Another participant affirmed availability of technology such as computer will encourage adult learners to use:

“If computers are available for learning it will help them use it and let me say all the new technology.” (Agbeke)

Theme 4 “Identification of Challenges”

The facilitators were very positive about using technology in an adult literacy programme. However, some of the facilitators stated some of the challenges that may hinder the realisation of digital intervention. This participant expressed:

“But we are in the rural area, we don't have Wi-Fi and electricity but if it is there we can display a lot of things. Even the word they cannot. They only rely on the words' photocopy whereas we can say just download certain applications when you get it. It will be very good if it is available for us” (Bolatito)

While another participant advocated for the availability of the technological tool that will their adult learning:

“Some of us cannot offer it because we don't have a computer, if we have the computer we can offer that learning area that will help them to use the computer” (Labake)

DISCUSSION OF THE THEMES

Preeminent from this study is that facilitators have established the need for ICT integration and its usefulness to learning in adult literacy programmes. Several studies (Mikre 2011; Sadaf *et al*, 2013; Adelere & Akintolu, 2016; Saltan & Arslan, 2017; Akintolu, Adelere & Nzima, 2019), have alluded to this integration of technology into adult literacy programmes to adapt teaching and learning based on individual needs and not considering physical location and time. According to

the study by Ahmed, Bhatti, Gölgeci and Arslan (2022), it was reported that education is still striving to get to the top in the area of ICT integration with sectors such as Small and Medium Scale (SMEs), and health ahead. Corroborating the need for integration, Bogdan-Martin (2017) asserts that Africa was identified as the continent with the lowest ICT penetration and growth, which corresponds to almost 75% of the world's offline population. This contrasts with the Arab States and Asia/Pacific, which had 58%, Europe had 21%, and the United States, which had 35%. Prominent among the kind of technology identified include web-based mobile technology, use of the internet, computer base, technological delivery methods, online instruction and application. Alluding to these kinds of technology tools the experiment of Akintolu, Adelere and Nzima (2019) also adopted the use of mobile technology as an experiment for learning among adult learners, however, Dighe and Reddi (2006) recording a pilot study using radio, television and video cassette. This varies based on the year the study was carried out as the penetration of mobile technology is on the increase, especially in African countries. Considering the study in recent years Lineo and Poku (2016) also agreed in their study that the most frequent ICT tools for adult literacy programmes were email and mobile technology. However, this study highlighted a different kind of technology that can aid the acquisition of basic and functional literacy skills and how it can be introduced to support learners' motivation. The study presented the outcome of responses of the interview conducted for participating facilitators, in which the following technology was highlighted. This includes the use of television, mobile phones, computers, projectors, applications for teaching and the use of the Internet. In accordance with the present study, a previous experiment by Adelere and Itasanmi (2017) demonstrated the use of two types of ICTs tool which is mobile devices and computer.

Another initial objective of the study was to identify the challenges that can face when using technology in an adult literacy programme. However, some of the facilitators stated some of the challenges that may hinder the realisation of the digital intervention which include electricity failure, lack of computers at literacy centres, age factor, and adult learners being digital migrants. This reflects the constraints identified by authors (Adelere and Akintolu, 2016 and Akintolu, Adelere and Nzima, 2019), issues such as technical know-how among facilitators, and lack of resources to support Adult literacy programmes most especially among countries in the developing world. Supporting the challenges identified by this study, Namatovu, Oyana, & Sol (2021) despite the fact that most developing nations have not yet adopted ICT adoption policies, this has an impact on their level of ICT penetration and growth because it seems difficult to do so due to a lack of understanding of the important factors influencing ICT adoption and usage in different sectors. Due to these challenges, this is why Murgor (2015) concluded that ICT growth appears to be slower in developing nations, including African nations. However, Davis in the Technology Acceptance Model proposes that when users are introduced to innovation, different variables impact their choice about how and when they will utilize it.

LIMITATIONS OF THE STUDY

This study was conducted in one province of South Africa; therefore, the findings may not be generalized to other provinces in the country. However, it was an in-depth interview which probed the interviewees for personal experience, also the province selected by the authors for this study is one of the most affected provinces in terms of the high level of illiteracy in the country.

Additionally, the adult facilitators were conveniently selected, which may not represent the overall opinion of others in the province, due to the large land of the province chosen for the study.

RECOMMENDATIONS

The study focuses mainly on the perspective of adult facilitators view on the digitization and integration of ICTs into adult literacy programmes. While this study has enhanced our understanding of the need to develop a more robust adult literacy programme in South Africa using technology. It is pertinent for the researchers to provide the following recommendations:

- Create a national programme that would involve adult learners using technology to learn.
- Increase government support for adult literacy programmes,
- Establish a collaborative effort across several governments such as the Department of Information Communication Technology and the Department of Adult Education,
- Employ the involvement of other stakeholders such as Local and International Non-Government Organisation, Government agencies in order to fund such initiatives,
- Public-Private Partnership (PPP) approach

CONCLUSION

The study explored the perceptions of adult educators in the use of ICT in various adult learning centres to enhance teaching and learning. Various studies affirmed that use of technology in teaching and learning is critical to learners' performance as well as attainment of learning's goals. However, the studies highlighted various challenges to integration of ICT in developing African countries. Findings from the participants revealed that the use of ICT in adult learning centres needs improvement. The report concluded by demonstrating how technology may be used as a teaching and learning tool and a model that can successfully assist adult learners in meeting their needs, hence raising the level of adult literacy rate. In addition, the researchers think that technology needs to be completely incorporated into adult literacy programs in South Africa., for this may help in achieving Sustainable Development Goal 4 and meet the demand of the 21st century. For possible area for future research would be to introduce an intervention on how technology (computer, mobile technology etc.) can be integrated into the programmes considering the capacity building of the facilitators.

Competing Interests

The authors have no competing interest to declare

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