



## Teachers' Perceptions of Integrating Technology in Rural Primary Schools to Enhance the Teaching of English First Additional Language

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### Article Info

Received: August 3, 2022

Accepted: November 26, 2022

Published: March 14, 2023

 10.46303/jcsr.2023.8

### How to cite

Maja, M. M. (2023). Teachers' Perceptions of Integrating Technology in Rural Primary Schools to Enhance the Teaching of English First Additional Language. *Journal of Curriculum Studies Research*, 5(1), 95-112.

<https://doi.org/10.46303/jcsr.2023.8>

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### ABSTRACT

Teachers' perceptions of integrating technology in rural primary schools play a substantial role in the Intermediate Phase (grades 4 to 6) in enhancing the teaching of English first additional language (EFAL). However, in a country such as South Africa, teachers experience barriers such as time constraints, load shedding, a lack of facilities, a lack of digital skills and an internet connection which challenges the incorporation of technology in language lessons in this posthumanism era. This study explored teachers' perceptions of integrating technology in EFAL classes in rural primary schools in Limpopo, South Africa. There are several studies on how teachers feel about using technology in secondary schools and higher education, but only a few have concentrated on rural primary schools specifically the Intermediate Phase. Therefore, this area deserves further investigation to add to empirical data. An interpretivist paradigm guided this study informed by the technology acceptance model (TAM). An exploratory qualitative case study used semi-structured interviews for data gathering. Ten Intermediate Phase EFAL teachers were selected with the help of purposeful sampling. Using thematic analysis, the obtained data were categorized into codes and themes. It was found that teachers are willing to use technology to teach EFAL as it has revolutionized their teaching and appreciated its productivity in their teaching activities. It is advised that EFAL teachers receive additional in-service training on integrating technology into EFAL teaching. The acquired skills from the training may assist in time management and how to cope working with limited resources.

### KEYWORDS

Barriers, digital skills, learners, pedagogical practices, posthumanism, technology

## INTRODUCTION

Teachers' perceptions play a significant role in integrating technology (generally: computers, videos, hardware, software, and networks) in rural primary schools to enhance the teaching of English as an additional language. Ventouris et al. (2021) assert that the integration of technology is centred on teachers' perceptions of technology's value as a tool in teaching English first additional language (EFAL). When using technology in classrooms, it is positioned as a tool that can improve the teaching, learning and assessment process in creative ways (Lotherington et al., 2021), which means that the use of technology can enhance teachers' practice and learners' learning. However, teachers' perceptions on how to integrate technology in teaching, specifically in the rural Intermediate Phase (grades 4 to 6), need to be explored in order to profit from its significant advantages in the teaching of EFAL. The technology-based teaching and learning environment has the motivation to benefit teachers and learners alike to address the posthumanism era's pedagogies (Maphosa et al., 2021). Ningsih (2021) asserts that the post-human era is a reminder of the lack of technology literacy and resources for socially marginalized teachers. This paper argues that understanding the teachers' opinions about the use of technology in the teaching of EFAL, especially in rural primary schools, may mitigate negativities prevailing amongst the teachers in order to enhance the teaching of a second/additional language.

The posthumanism world has taught teachers how to handle the kinds of complexities brought by developments in technology which were limited during the humanism era. Posthumanism challenges the anthropocentric ideas that elevate human beings above other species (Yan et al., 2020). The critique of humanism proposes that we already live in a posthuman reality due to technological developments in teachers' practices. Theresa (2021) asserts that according to posthumanism, we ought to give up conceiving ourselves as superior to the rest of the world, embrace the interconnectedness and interdependence of everything, and acknowledge that we are an integral component of nature. The central concept of posthumanism is entanglement, which refers to an ensemble of entities and beings that are also entangled with a variety of other ensembles, in the environment it inhabits and the technology it uses (Blaikie et al., 2020). The authors affirm that employing the posthumanism approach means that there is a need for re-evaluating teaching practices, the production of knowledge and the dissemination of these concepts. Thus, posthumanism is referred to as a posthumanist manifestation in pedagogical practice (Rashid et al., 2021). These researchers add that the posthuman viewpoint on pedagogy offers fresh and exciting ways to advance toward a true social transformation of learning based on technology with the idea that humanity can be transformed, transcended, or eliminated either by technological advances or the evolutionary process (Rashid et al., 2021). Therefore, a posthumanism pedagogy seeks a genuine and believable social transformation amid socio-economic background differences by rejecting anthropocentrism (a time when humans are seen as the most important thing on earth than other entities) and considering the ever-evolving technology (Chithra, 2019).

Complications of the twenty-first century have forced modern man to consider posthumanism. For example, in 2020, the COVID-19 pandemic confined every human being across the globe to one place which was home. Schools were closed and teachers had to devise other pedagogical practices that could reach learners. According to Evans-Amalu and Claravall (2021), the pandemic changed education because teachers were forced to use and learn digital technology and incorporate a variety of digital tools into their teaching practice. Therefore, the posthumanism approach was an option. The pandemic left EFAL teachers with little choice, but to transition to technology integration in their teaching.

In South Africa, particularly in the province of Limpopo, rural primary school teachers were not left behind in this rejection of the anthropocentrism era. The entanglement was a way, to provide borderless teaching in rural communities, as Chisango et al. (2020) confirm that since the advent of technological improvements, learning is no longer confined to physical locations and may now occur anywhere at any time. Chithra (2019) attests that both the teachers and the learners have evolved into posthumans in every way, thanks to technology and modern living. Therefore, this study sought to explore teachers' perceptions of integrating technology in rural primary schools to enhance the teaching of English first additional language. Against the above background, the research set out to answer the following question: What are teachers' perceptions of integrating technology in rural primary schools, particularly in the Intermediate Phase to enhance the teaching of English first additional language? This paper is arranged as follows: theoretical framework, methodology, findings, discussion and conclusion.

### **THEORETICAL FRAMEWORK**

The study is grounded in Davis's (1986) technology acceptance model (TAM), which is appropriate for the posthumanism era. TAM aims at predicting and evaluating people's willingness to accept technology. The idea focuses on how technology is used, with perceived usefulness and perceived ease of use being the two factors most strongly affecting someone's willingness to utilize technology (Liu et al., 2010). In contrast to perceived ease of use, which refers to how much individuals believe a specific technology would be simple to use, the perceived utility of technology is described as a person's perception that utilizing a particular technology will boost productivity (Davis, 1986; Ertmer, 1999). Technology integration and utilization in the classroom are governed by the idea of perceived usefulness and ease (Ghavifekr & Rosdy, 2015). This approach also highlights obstacles and advocates for technology integration in the teaching of EFAL. TAM strives to offer a framework for monitoring the impact of outside factors on internal attitudes, intentions, and beliefs (Davis, 1986; Muchran & Ahmar, 2018). According to Abukhattala (2016), a key factor in the success of implementation is the attitude of teachers, who ultimately decide whether to integrate technologies into EFAL teaching as well as how to do so.

TAM, which aims to provide a framework for tracking the impact of environmental factors on internal attitudes, beliefs, and intentions, was deemed relevant as the study focused on EFAL teachers' perspectives of integrating technology in rural primary schools. When

analyzing the literature, the theory was employed; for example, teachers thought that implementing specialized technological software for data needs, monitoring, and marking was a way to lessen the burden (Roberts, 2016). This article aligns with the teachers' comments (Roberts, 2016) because they are consistent with the study's theory of choice. The theory was suitable since it permitted the author to ground the study in the posthumanism perspective which aligned with the study's findings.

## LITERATURE REVIEW

### **The use of technology in teaching EFAL**

Masruddin (2014) claims that teachers' move to using technology to teach is a paradigm shift in the organization and routine of the classroom. The potential of new technical tools to change an out-of-date educational system, better educate learners for the information age and expedite national development efforts has been a driving force behind the global use of technology in teaching (Katemba, 2020). For instance, teaching can now take place everywhere, with no distance limitation and at any time with technological advancements (Chisango et al., 2020; Kalimullina et al., 2021; Konyana & Motalenyane, 2022; Rahayu & Wirza, 2020; Tsakeni, 2022). Furthermore, teachers today have access to a variety of educational resources because of technology. Alqahtani (2019) asserts that modern sound and visual effects, computerized display devices, and English content that mirrors real-life circumstances are more effective than traditional methods and capture the interest of learners who are then motivated to learn.

According to research by Rahayu and Wirza (2020), 59.4% of EFAL teachers had a good opinion of the use of technology in their lessons and acknowledged its value for teaching. Teachers claimed that technology increased their digital skills and enhanced their use of a variety of methodologies, which led to better educational outcomes. One of the most important advantages of using technology in the teaching of EFAL, according to teachers, is that it provides a visual as well as a word to improve vocabulary in the target language and the limitation of spelling errors that may occur without becoming aware (Harvil, 2018). Furthermore, it allows repetition to improve listening and speaking as needed, and the audio system enhances and clarifies the teacher's pronunciation (Harvil, 2018). In the United Kingdom, Ventouris et al. (2021) found that EFAL teachers held positive views on integrating technology in teaching, by affirming that the practice did not change their role as teachers but improved their quality of teaching. Teachers found technology integration in the teaching of EFAL to be beneficial, especially when done in a balanced way that does not obstruct other learning opportunities; for example, achieving a good balance of digital and non-digital learning activities.

Chabinga (2021) discovered that some teachers in Zambian primary schools thought the ZeduPads were a powerful linguistic multimodal and semiotic instrument that changed not just the way teachers taught, but also the learners' attitude toward learning. This shift in learners' attitudes resulted in a progressive gain of literacy and competency, as seen by the new vocabulary learned since the introduction of tablets into the classrooms. According to the teachers' comments in Roberts' (2016) study, adopting specialized technological software for

marking, monitoring, and data requirements was a way to lighten the strain. This suggests that government policy that is sensible and well thought out can help to prioritize teachers' workload.

Rwodzi et al. (2020) found that even though the Department of Basic Education's policy does not recommend using social media to teach EFAL, teachers in South Africa believed that sharing online resources with learners on social media groups for research produced positive outcomes. Chisango et al. (2020) found that teachers showed a good attitude toward technology adoption and were willing to integrate technology into teaching and learning though there were obstacles that challenged the process. Buabeng-Andoh (2012) confirms that if teachers have a favorable attitude toward integrating technology, they will be able to offer helpful advice on how to embrace and integrate it into EFAL teaching.

### **Technology and learners' learning**

Technology gives learners rapid access to knowledge, enhancing learning both in and outside of the classroom (Solano et al., 2017). Most of the teachers indicated that learners today are far more digitally empowered and have a plethora of possibilities for learning in their own time and space and according to their own interests (Mollaei & Riasati, 2013). Through virtual classrooms, a motivated learner can absorb knowledge even without the teacher's direct involvement (Chithra, 2019). Technology has huge learning potential both in and outside the traditional classroom setting because it facilitates access to a variety of learning resources using different platforms, making it easier for learners to participate in lessons taught by native speakers (Bećirović et al., 2021; Rahayu & Wirza, 2020). According to Hazarika (2017), using technology to teach learners fosters their ability to think positively and communicate in the target language because it raises learners' engagement and motivation as well as their sense of autonomy and exposure to the native culture. It also improves teacher effectiveness and teacher-learner interaction.

### **Barriers to technology integration in EFAL teaching**

Several studies showed contrasting results and findings on the perceptions of teachers regarding the incorporation of technology in EFAL classes. Teachers in the Netherlands expressed a lack of knowledge on integrating social media into their lesson plans out of a fear of losing control over easily distracted learners (Van Den Beemt et al., 2020). Research conducted by Buabeng-Andoh (2012), Raman and Yamat (2014), and Muia et al. (2022) found that administrative work like filling out record book forms, creating report cards, and keeping attendance records contributed to teachers' concerns about being overworked. This led to the rejection of incorporating technology tools into the teaching of English lessons because of their concentration on curriculum coverage and assessment. Teachers also were concerned about the challenge of integrating technology in their lessons with classes comprised of a large number of learners.

Chisango et al.'s (2020) research discovered that in rural secondary schools in the Eastern Cape of South Africa, the infrastructure, poor electricity supply, internet connectivity, teachers'

lack of necessary ICT skills and their attitude were barriers to the successful integration of technology in their EFAL lessons. In Zambia, teachers' lack of skills on how to utilize the ZeduPad tablets was a struggle over a period of time before becoming more at ease with their application. The findings of Hazarika's (2017) study demonstrated that barriers to improving EFAL included teachers' excessive reliance on various technological mediums and a lack of spoken communication among learners. The replacement of the teacher's voice with mechanical and pre-arranged content, technological mediums that lack real-time impact and also a failure to provide crucial feedback, were also seen as barriers to EFAL enhancement. Teachers in low-income communities said that 40% of their learners can only access internet materials through their parents' smartphones (Ventouris et al., 2021) which was perceived as being unfair, as online teaching and learning only benefits a specific portion of learners.

### **Situating the gap: Teachers' perceptions of integration technology in teaching EFAL in Limpopo**

Although numerous researchers have studied the perceptions of teachers on incorporating technology in schools, little research has been conducted on their perceptions in EFAL classes particularly in the Intermediate Phase (learners of ages between 10 and 12) in rural primary schools in the province of Limpopo. Tshiovhe and Monobe (2021) conducted a study on the integration of pedagogical technology into the professional development of accounting teachers in Limpopo secondary schools. They concluded that the integration of pedagogical technology should be included when accounting teachers receive professional development and that this should be a continuous development process. The study conducted by Lekgothoane (2021) investigated the general levels of digital classroom technologies and teachers' usage of technology in selected schools in Limpopo. The findings of this study identified a low level of digital classroom technology integration, due to inadequacies of digital classroom technologies, lack of internet connectivity, lack of adequate teacher training on digital classroom technology and failure in the implementation of e-education policy. The study concluded that schools that were serviced by the Limpopo CoLab project lacked digital classroom facilities to practice what was learned during training. Another study was conducted by Thaba-Nkadimene and Mogatli (2020) on the experiences and reflections of principals and teachers on the use of educational technology in selected rural schools in the Mopani District of Limpopo. The findings revealed a lack of modern educational technology in schools with subsequent minimal usage levels.

Based on various studies in the technology field, the author argues that this paper is unique and contributes in a different way to the ongoing discussion in this field. Firstly, there are no similar studies conducted on the integration of technology in the teaching of EFAL in rural primary schools in this posthumanism era, specifically in the Intermediate Phase in this province. Therefore, it fills the gaps and expands the body of knowledge in this field. Secondly, it is conducted in a rural area where less attention has been given to EFAL teachers who have often been overlooked in research.

## **METHODOLOGY**

This study was carried out in a rural area of Limpopo, South Africa. There are fourteen primary schools classified under quintile one in this area. Quintile one schools, which are non-fee-paying schools, are considered to be the poorest because of both the surrounding community's poverty and specific infrastructural issues (Grant, 2013). Some of the classes in these schools are overcrowded while others meet the South African primary school-teacher ratio of 40:1 (Department of Basic Education, 2016).

The study employed a qualitative interpretivist approach to investigate how teachers felt about incorporating technology in EFAL classes located in rural primary schools. A qualitative interpretivist investigation identifies and describes what individuals do in their daily lives, as well as the significance of their actions (Denzin & Lincoln, 2018). Additionally, data are frequently acquired in the natural settings of participants using qualitative data-gathering methods. In this paper, an exploratory case study design was employed. Yin (2003) affirms that a case study should be conducted to look into the issue when the phenomenon being analyzed does not have a distinct, singular set of outcomes.

Ten EFAL teachers were chosen through a purposeful sampling process from five primary schools located in rural areas. Purposeful sampling assisted in selecting the participants and the site, which has been found to be beneficial because individuals and sites are chosen for possessing information and characteristics in which the researcher is interested (Creswell, 2014). As the author has access to the circuit at the designated primary schools as part of the community engagement project, the data were collected through in-depth face-to-face interviews during the monitoring and support phase. The biographical details of the participants are listed in Table 1.

**Table 1:** *The participants' biographical information*

School	Participant s	Gender	Ages of participants	Number of learners in the class	Teaching experience (in years)
A	T1	Female	39	63	17
A	T2	Female	49	68	21
B	T3	Female	30	65	6
B	T4	Male	49	59	22
C	T5	Female	42	38	17
C	T6	Male	51	37	19
D	T7	Male	55	40	25
D	T8	Female	37	36	11
E	T9	Male	37	35	10
E	T10	Female	59	30	30

Detailed face-to-face interviews were conducted because they allowed the researcher to gain a thorough grasp of an individual or situation. The aim of the inquiry was described to the research participants, and they were asked to consent to have their comments voice recorded. The interviews were conducted with ten participants and with each interview lasting around 30 minutes. During the interviews, the author was able to ask the participants questions, learn more about their views, opinions and ideas on a given topic (Strydom & Bezuidenhout, 2014). The in-depth interviews were appropriate for the study because the objective was to learn more about teachers' viewpoints on using technology in facilitating EFAL lessons.

To establish trustworthiness, the study involved member checks and extensive engagement in the field. Additionally, throughout the study, all procedures and actions that the author took were documented. Anney (2014) suggests that the researcher keep a reflective notebook to document all fieldwork-related activities as well as record personal observations regarding the study.

### **Data Analysis**

The six stages of thematic data analysis described by Braun and Clarke (2006) were applied in this study: gaining familiarity with the information, creating preliminary codes, searching for themes, reviewing those themes, explaining and labeling the themes, and report writing. A professional transcribed all the interviews and thereafter, the author read the transcribed information several times. Common phrases were categorized based on what the participants said. Each sentence was assigned a code, and highlighters were used to show similar or related ideas. Following that, the numerous codes were categorized and organized into themes. Thereafter, the prospective themes were re-evaluated and grouped together with the overlapping ones, fine-tuned, and every now and then matched to the raw data. The key to each theme was determined and named using the participants' verbatim comments relating to the research question. Finally, a written narrative report was generated, based on the findings that emerged from the analyzed interviews.

### **Ethical Issues**

Participants at the sampled primary schools were all EFAL Intermediate Phase (grades 4 to 6) teachers. To preserve the schools' and participants' identity and confidentiality, pseudonyms were used, and they were referred to, for example, as School A Teacher 1: SA-T1, SA-T2, to SE-T10. Before the study began, permission was received from the author's university (ethical clearance number: 2017/09/13/90233522/01/MC), the Limpopo Province Department of Education, the circuit office, and the participating schools and teachers. The author followed all research ethics guidelines.

## **FINDINGS**

This study sought to investigate teachers' perceptions of using technology in the teaching of EFAL in primary schools located in rural areas. Three themes that resulted from the data analysis are as follows: Technology has reduced teachers' overload and revolutionized teaching; learners



find technology easy to use and barriers to implementation of technology. Each theme is briefly presented below.

### **Technology has reduced teachers' overload and revolutionized teaching**

Most of the schools in this circuit report that their teachers have integrated technology in the teaching of EFAL in their classes. All the participants in the study believed that teaching has been transformed with technology and were positive about the varied benefits of technology when teaching EFAL, which is comprised of four components: listening and speaking, reading and viewing, writing and presenting and finally, language structures and conventions. Their responses were in relation to what they experienced before and after the integration of technology into their teaching practice.

SB-T3 reported on the change that technology has made to her teaching:

*The teaching has been revolutionized, the old is gone and the new makes everything very effective. Teaching and learning can happen anywhere and anytime. Even when the teacher is absent from school, technology makes it easier for anyone to teach his/her class in his or her absence with the planned lesson.*

SC-T5's response was similar to the above:

*I can say it saves time and shortens the distance for all of us as stakeholders as emails can be sent with attached documents needed in teaching and it can also be accessed by any stakeholder involved in the department of education.*

SB-T4 shared the same view as above:

*The advantage of using these devices is that they reduce overloading such as handwritten work, integrate all the subjects, talk less and spelling mistakes which can be a burden to the teacher. The teaching and learning environment becomes conducive to active participation.*

From all the above responses it can be deduced that the participants perceived the usefulness of technology in their teaching of EFAL. The indication is that in the posthuman era, teaching has changed for the better since the integration of technology, certain administrative tasks are more easily facilitated, communication is improved and the use of technology in teaching motivates active participation of the learners and thus creating a more engaging environment.

### **Learners find technology easy to use**

The goal of technology integration in EFAL teaching should be to improve all four language components. SD-T8 explained that technology has helped her use a variety of methods to incorporate different learning styles:

*Technology is easy to use for learners because most of them like music. When they see you bringing the speakers into the classroom, they automatically pay attention.*

SA-T2 acknowledged that the use of technology encouraged active participation which is vital when learning a language:

*I can assure you that learners will go very far because of this integration. It encourages confidence in speaking and reading.*

SC-T6 concurred with SA-T2 and explained that technology offers access to a wide range of media:

*Learners can learn easier because they can see pictures. When they see the pictures, they understand the written words and learn easier to their full potential. Teaching is easy, and learners' understanding is easy.*

The responses above portray that, participants were conscious of the advantages of technology utilization in teaching all four language skills. Technology takes into account various learning styles. It brings a virtual learning environment into the physical classroom environment. As learners learn through what they see, what they hear and what makes sense to them, learning is internalized.

### **Barriers to the implementation of technology**

Although the teachers were supportive of the use of technology in teaching EFAL, they also mentioned several challenges and disadvantages of its use.

SA-T1 identified challenges that she had experienced in her lesson preparation:

*We need to acknowledge that technology also has its own disadvantages. Like sometimes it needs preparation time for searching material on the internet while we need to finish the curriculum with time constraints. Sometimes there is load shedding and you find that the batteries are low. We also struggle with the internet connection as the router is placed in the office and our classrooms are far from the office. If you want to use the internet you have to arrange with the whole school not to connect and move the class next to the office.*

SD-T7 acknowledged that not all teachers were equipped with the relevant technology skills. He suggested that:

*We still need more training in digital skills. I still need to understand how to set up a google classroom. More training is needed on this as anything can happen again, and learners have to stay home. For example, the floods we experienced in this part of our country.*

In terms of challenges that teachers face in the classroom, SE-T9 observed the need to monitor learners' engagement with technology:

*I have realized that they[learners] need monitoring if you give them those gadgets, they will listen to music, and do what not tasked with, so you need to monitor them.*

SA-T1 indicates a shortage of equipment, especially with large numbers in classes:

*Some lessons need learners to work on individual computers and a large number of learners makes it difficult as I have to divide the group into two with the lack of these facilities.*

From the responses above, as SA-T1 has indicated, it is evident that the majority of participants encountered difficulties implementing technology in the teaching of English first an

additional language. Difficulties such as time constraints, load shedding (a controlled method for dividing up the electricity that is available to customers by Eskom, the South African electricity supplier), internet connection, training in digital skills, learners monitoring during the use of devices, lack of digital devices and large classes. One participant indicated the floods experienced in the province of Kwa-Zulu Natal in 2021, disrupted schooling and access to the internet, as an example.

## DISCUSSION

### **Technology has reduced teachers' overload and revolutionized teaching**

The purpose of this study was to investigate how teachers in rural primary schools felt about using technology to improve the teaching of English first additional language. Most of the teachers sampled were female which is typical in South African primary schools where female teachers outnumber male teachers (Davids & Waghid, 2020). Sampled participants were very experienced in their EFAL teaching and have experience teaching in the humanism and the post-human era. For example, Giudici et al. (2020) note that teachers' roles will change significantly from humanism to a posthuman era as a result of learners' familiarity with technology and the need for technology to be increasingly used in the classroom. Teachers will become mentors, mediators, guides, facilitators, learning coordinators, and compilers of learning tools. Therefore, it is crucial to investigate how they view the use of technology in the teaching of EFAL.

This study revealed that teachers perceived that technology has revolutionized their teaching. Teachers indicated that teaching and learning can happen anywhere and anytime, technology saves time and reduces the distance and overloading such as handwritten work, integrates all the subjects and the lesson is less teacher centred. Cook (2016) verified that in the posthumanism era, teachers can be seen writing on a screen-displayed pad rather than on the chalkboard. This depicts them as cyborgs and attests that the teachers are becoming more dependent on technology. The assumption is that teachers view technology integration from different perspectives.

### **Learners find technology easy to use**

The EFAL teachers' perceptions were also based on how they perceived the integration as useful to the learners. Teachers felt that technology supports the teaching of the four language components of EFAL. The use of a wide range of technology applications such as speakers in the classroom increases learner engagement, encourages active participation and motivates listening, speaking, viewing and reading as well as tapping into different learning styles. This aligns with Parvin and Salam (2015) who observed an improved learning environment when audio-visual material was used during the observation of classes in rural government primary schools in Bangladesh where learners demonstrated extraordinary alertness, enthusiasm and curiosity. Technology allowed the learners easy access and use of the information such as pictures or visual representations, increasing vocabulary and the understanding of the subject matter. To support this, Ceder (2019) attests that through the use of a technological device, virtual reality can be accessed, and learning about the difference between virtual and physical

reality takes place. This permits learner engagement and connection which enhances the learning of the language. This is supported by Nkengbeza et al.'s (2022) observation of teachers who expressed that accessing a variety of online teaching resources facilitated the teaching and learning process and accelerated their learning of the language.

The participants indicated that the use of technology, assisted in the planning of lessons with access to a wide range of information and the word processing apps assist in eliminating errors such as spelling and grammar mistakes (Harvil, 2018). Pen and paper are considered less desirable by teachers in the posthuman era. Technology usage has become an option for teachers as it saves time and minimizes errors that one might create when using pen and paper. Educational resources from the internet can also strengthen the teachers' planning as new ideas can be learned from other teachers and EFAL specialists shared on the internet. This implies that the cyborg teachers' ability to perceive the usefulness and the ease of technology in EFAL lesson planning and presentation has transformed their everyday tasks.

The participants showed a willingness in accepting and using technology and appreciated its productivity in their teaching activities. Some reported that their workload had been reduced. Therefore, the use of technology facilitated the teaching and learning process. This finding contradicts Raman and Yamat (2014) who found that teachers hesitantly used technology as they indicated that they were overburdened with administrative duties where different forms have to be completed.

The move to technology use where lessons are planned and recorded in an electronic file ensures that when a teacher is absent, substitute teachers can use the planned lesson to teach the class. This suggests that the teaching and learning process is not interrupted but is facilitated by technology. Technology applications such as emails save time as documents needed by the other stakeholders can be shared as quickly as possible unlike traveling to the required offices or departments. According to Mladenova et al. (2021), teachers and learners can both teach and learn from any location at any time thanks to email's increased flexibility in time management and ease to use and comprehension. Therefore, teachers believe that using specific technology increases productivity. This belief corroborates the idea that the purpose of the information system is to improve job performance (Davis, 1986) as emails address a wide range of technical support and teaching arrangements issues (Jung et al., 2021).

### **Barriers to the implementation of technology**

Despite the teachers' positive attitudes, challenges in the use of technology in the teaching of EFAL were experienced. Considerable time for preparation was needed for searching the material on the internet while the load shedding, where power cuts were regularly experienced, was problematic as electronic devices could not be used or could not be recharged. Much time was needed for the completion of the curriculum; therefore, technology integration was sometimes seen as time-consuming. In some classes, there were insufficient computers to accommodate a large number of learners resulting in dividing the class into two groups so that learners could use computers in turns, which required additional time. Monitoring of learners

when using the gadgets was also highlighted as a challenge as learners strayed from the task at hand, using technology for pleasure rather than for learning.

The fact that teachers lacked digital literacy posed further difficulties. This indicated the need for more training on how to set up activities that would able them to teach remotely, for instance, google classroom. Acquisition and development of technology knowledge and skills would assist in teachers in being prepared to teach online if turbulences such as those experienced during the pandemic, but it would also ensure that teachers could effectively integrate technology into their practice. This is confirmed by participant SD-T7 who indicated the floods experienced in Kwa-Zulu Natal in April 2022 where learners and teachers were unable to attend school due to flooded roads. This shows that it is not only a pandemic such as COVID-19, that could also distract the normal operation of schools. Therefore, posthuman pedagogies are a solution to these turbulent situations that are disruptive to traditional teaching and the learning environment. This idea is supported by Marais (2021) who emphasizes that teachers need digital competencies to be able to create their own resources and make use of technology to make smart decisions. The finding is in line with Katemba's (2020) assertion that the main issue is the lack of in-depth continuing professional development for teachers who are expected to integrate new technologies into their classes.

Currently, the difficulties that teachers encounter is that there are disparities across the country – with some provinces being more adequately serviced and resourced with technology. Teachers and learners in rural communities have limited access to digital devices and internet network connectivity. This is confirmed by the participant SA-T1 who indicated that *'We also struggle with the internet connection as the router is placed in the office and our classrooms are far from the office.'* Researchers like Dube (2020) and Bacher-Hicks et al. (2021) support the participant's statement by indicating that online learning appears to favour wealthy communities, widening the gap between rich and poor. For example, the integration of technology into teaching in urban schools is possible due to affordability and internet connection infrastructure in contrast to schools located in rural areas where there is a lack of internet connectivity facilities. The collected data revealed that the routers provided by the Department of Education are not powerful enough to cover the entire school and allow for the simultaneous use of multiple devices. This challenges teachers' access to connectivity at their own desirable times in order to present their lessons.

The main focus of this study is developing an understanding of the teachers' point of view on the integration of technology in their practice which can provide valuable insight as well as the practical challenges surrounding the use of technology in the teaching of EFAL as a tool for enhancing learners' acquisition and development of a second/additional language. In the posthumanism era, teachers' perspectives can be beneficial in the selection and implementation of pedagogical practices that incorporate digital resources.

## CONCLUSION

The aim of this study was to elicit the perceptions of teachers regarding the use of technology in rural primary schools to enhance the teaching of English first additional language. It was found that there is a willingness to adopt technology in the EFAL classes as it could be seen as revolutionizing their teaching. Teachers appreciated technology's productivity in their teaching activities. However, barriers such as time constraints, load-shedding, lack of facilities and teachers' lack of digital skills obstructed the successful integration of technology in the lessons. By presenting the Intermediate Phase teachers' perspectives on incorporating technology in EFAL classrooms, the study contributes to the body of knowledge. This study has significant limitations that should be addressed in follow-up studies in the area. Firstly, the sample's restriction to teachers in the Intermediate Phase prevents detailed comparisons with the foundation and senior phases of primary schools. Secondly, the current study focuses especially on how teachers feel about using technology in the teaching of EFAL; perceptions in other school subjects may vary. It is suggested that teachers should receive additional in-service training on how to integrate technology into EFAL classes. The acquired skills from the training may assist in time management and how to cope working with limited resources.

## Acknowledgements

The author expresses her sincere gratitude to all the study participants. This study's funding came from the National Research Foundation (NRF) grant number: 121871, which made it possible for it to be finished. The opinions presented here are not those of NRF.

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