



## Enhancing pedagogy through technology: The perspectives of primary school teachers in selected schools in KwaZulu-Natal, South Africa

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### Abstract

Technology integration is gaining traction in South African primary schools. Therefore, it is important to elicit primary school teachers' perspectives of technology integration in education. This qualitative study examined how primary school teachers integrate technology to enhance their pedagogical practices. An interpretive paradigm underpins this study, and the Technology Acceptance Model (TAM) was used as a theoretical lens. Focus group interviews were conducted with ten primary school teachers who were purposefully selected from schools located in the King Cetshwayo District in the KwaZulu-Natal province of South Africa. The findings of the study show that teachers find technology integration into their pedagogical practices to be valuable. Technology integration helps them to clarify the content in a unique way that enhances learners' understanding of the content. Based on the findings, the study concludes that primary school teachers have accepted technology in their pedagogical practices. This is due to its Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) as it was reported by the teachers. The study recommends that primary school teachers be exposed to continuous professional development programmes on technology integration to sustain their use of technology in their classrooms.

**Keywords:** learners, pedagogy, primary schools, teachers, technology integration.

### Introduction

The ubiquity of technology around the globe constantly influences practices in different fields, including education. As a result, education ministries in both developed and developing countries invest billions in technological tools for schools. They also encourage all teachers to integrate technology in their classrooms to enhance their pedagogy (Suyatno et al., 2023). For example, several African ministries of education, through the African Ministerial Forum, have stressed the acceleration of technology integration in education if the goals of Africa's Agenda 2063 are to be achieved (African Union, 2020). The South African government, through the Department of Basic Education (DBE), has accepted the integration of technology in teaching and learning a long time ago (Munje & Jita, 2020). To integrate technology into South African schools, the DBE has devised different strategies, including the provision of technological resources

to schools and implementing professional development programmes to enhance teachers' technology integration skills (Gcabashe, 2024). One Teacher One Laptop and Operation Pakisa are only two of several initiatives to provide South African schools with technological tools.

Technology integration entails incorporating computer-based communication into daily pedagogical practices to enhance instruction (Ghavifekr & Rosdy, 2015). Teachers are expected to select the right technological resources to support their lesson delivery (Bajracharya, 2021). They should identify suitable technological resources to enhance content delivery such as Microsoft packages and social media platforms (Ntsala & Seabela, 2023). In other words, teachers use different hardware and software tools and platforms in their classrooms to enhance their instructional practices. Furthermore, Dlamini (2023) maintains that the integration of technology in teaching and learning started an

unparalleled transformation in knowledge creation and representation. Thanks to technology, teachers can design their content in a more aesthetic and interesting manner to attract learners' attention. Creating content in a more engaging manner is even more important for primary school learners because they easily lose interest in learning. Kilag et al. (2022) support this view by emphasizing the need to integrate technology into primary school classrooms.

Therefore, it is important to explore primary school teachers' perceptions of technology integration. It could contribute towards a comprehensive understanding of teachers' views of and experiences with integrating technology to support their pedagogical practices. To achieve the aim of this study, two research questions were formulated: first, how do primary school teachers perceive the usefulness of technology integration in improving their instructional practices? and, second, how do primary school teachers perceive the usefulness of technology integration in enhancing learners' learning?

### ***Problem Statement***

Despite national initiatives aimed at accelerating digital education, such as the Department of Basic Education's (DBE) Operation Phakisa and One Teacher One Laptop programmes many South African primary schools, particularly those in rural areas like KwaZulu-Natal, continue to face challenges in meaningfully integrating technology into pedagogical practices (Munje & Jita, 2020). This means that many primary school teachers have limited digital infrastructure, inadequate training, and inconsistent access to technological resources. The DBE's Digital Learning Framework underscores the importance of continuous professional development in fostering technology adoption, yet research shows that many teachers lack adequate training, confidence, and pedagogical support to embed digital tools effectively in classroom instruction (Akram et al., 2022; Abedi, 2023). Furthermore, the persistent digital divide, poor infrastructure, and unequal resource distribution across rural schools exacerbate the problem, limiting the sustainability of technology integration for teaching and learning in South

African primary schools (Ntsala & Seabela, 2023; Shambare et al., 2022). Thus, international studies highlight the pedagogical value of technology integration in promoting learner engagement and differentiated instruction (Xu et al., 2021; Bice & Tang, 2022), there remains limited understanding of how primary school teachers in rural South African contexts perceive and experience this transformation. Without insights into teachers' perspectives, efforts to enhance pedagogy through technology risk remaining misaligned with classroom realities. Hence, this study seeks to explore the perspectives of primary school teachers in selected primary schools in KwaZulu-Natal to illuminate the contextual factors shaping their attitudes and practices toward technology integration in teaching and learning.

### **Literature review**

#### ***Benefits of technology integration into teaching and learning***

Several benefits of technology integration in teaching and learning are mentioned in literature (Abedi, 2023; Ntsala & Seabela, 2023; Xu et al., 2021). Xu et al. (2021) affirm that technology enhances learners' ability to think. This suggests that technology can boost learners' ability to generate ideas as they learn. They can use technological tools to find information and harness their ideas about the content they are learning. According to Spiteri and Chang Rundgren (2020), integrating technology in the early grades exposes learners to a variety of information sources and enriches their learning experiences. Technology also enables learners to access information in a variety of formats such as educational videos, games, and text that they can manipulate to enrich their learning experiences (Thomas & Schneider, 2020). Access to information in different formats can be useful to primary school learners since they have different learning styles and intelligences. Some learners learn best when visuals are used, and others learn best when sound is used. As a result, learning materials in the form of educational videos and games facilitate their knowledge acquisition.

Furthermore, technology integration creates learner-centred learning environments (Bice & Tang, 2022). In other words, technology

integration helps teachers to establish a learning environment that puts learners at the centre of learning activities. Goh and Sigala (2020) assert that technology integration creates a learning environment that supports collaborative and flexible learning since it not only expands the instructional model beyond the walls of the classroom, but also allows learners to interact with their peers and work together to engage in learning. Abedi (2023) believes that technology integration promotes constructivist-oriented pedagogy, which accelerates learners' understanding of the content and their application of new knowledge. Since technology enables the application of new knowledge, it can develop learners' higher-order thinking skills (Garcey, 2021). As learners apply new knowledge, they engage in creative thinking and problem-solving, which are important higher-order thinking skills they need to develop in the early stages of their education.

Technology integration is also commended for exposing learners to real-world experiences and stimulating their interest in learning (Goh & Sigala, 2020). To put it differently, technology integration exposes learners to authentic experiences that encourage them to learn. For example, educational videos can expose them to authentic learning activities. Arousing learners' interest by exposing them to authentic learning experiences involves them in the learning process. Wang (2020) agrees that technology integration enables teachers to design lessons that promote active participation. For example, teachers can take learners on virtual trips by means of internet-based technology. Virtual trips and educational videos can arouse learners' interest in learning and stimulate their involvement in the learning process.

### ***Teacher perceptions of technology integration***

As change agents, teachers are expected to promote technology integration as part of deep learning (Alberola-Mulet et al., 2021). Their perceptions play a significant role in technology integration. Akram et al. (2022) concur that teachers' perceptions of technology influence how they integrate it in their pedagogical practices. Teachers who perceive technology integration in

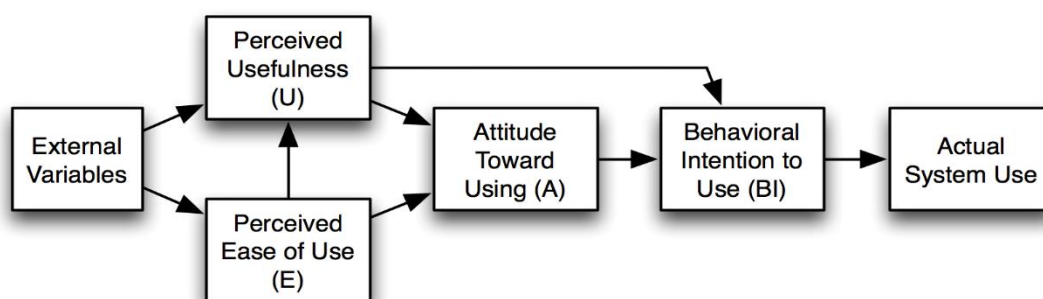
teaching and learning positively are likely to integrate technology into their classrooms, whereas teachers who perceive it negatively are less likely to do it. Numerous international and local studies have explored teachers' perceptions of technology integration. For example, Akram et al. (2022) conducted a systematic review of teachers' perceptions of integrating technology in education. According to their study, teachers viewed it in a positive light. They saw technology as a tool that enhances teaching since it not only makes learning more interactive, but also motivates learners. In South Africa, Shambare, Simuja and Olayinka (2022) studied teachers' views of technology integration in rural secondary schools. They found that teachers embraced it. Teacher perceptions were influenced by the training and support they got to integrate technology (Shambare et al., 2022). A study by Abedi (2023) in Ghana indicates similar positive perceptions of technology because it makes lesson preparation and delivery easier. In Eswatini, Nxumalo and Nxumalo (2023) investigated primary school teachers' views on integrating technology in English language instruction. Teachers were convinced that technology benefits English language instruction. Some of them erroneously believed that technology integration involves teaching basic computer skills.

On the other hand, a few studies found that some teachers had negative perceptions. For instance, Simuja (2023) explored South African teachers' experiences of technology integration in teaching and learning. The study found that some technology immigrant teachers experienced it negatively because some learners had better technological skills than they themselves and, therefore, they were opposed to integrating technology into their classrooms. Noor et al. (2020) similarly found that teachers were averse to technology integration in teaching and learning. Inadequate infrastructure influenced their perceptions. Taghizadeh and Hasani Yourdshahi (2020) carried out a study in Iran and found that teachers had misgivings about the effect of technology on young learners and recommended that technology be integrated only in the post-intermediate phase.

From the studies reviewed above, it can be inferred that several factors determine teachers' perceptions of technology integration. Factors such as adequate training in technology integration (Akram et al., 2022) and the affordances of technology (Abedi, 2023), positively influence teachers' perceptions of it. Likewise, factors such as a lack of technology integration skills (Shambare et al., 2022) and technology infrastructure (Noor et al., 2020) undermine teachers' perceptions of it. Based on the literature review, it can be concluded that substantial research has been conducted on teacher perceptions of technology integration and that different factors determine them. Nonetheless, research in rural settings is needed since technology integration is still perceived as a novel practice at rural schools. Furthermore, contextual factors peculiar to rural schools shape teacher perceptions of technology integration. Therefore, teacher perceptions of technology integration in teaching and learning at rural primary schools is the focus of this study.

### Theoretical framework

This study is underpinned by the Technology Acceptance Model (TAM). Drawing from the Theory of Reasoned Action (TAR), Davis (1989) introduced TAM, which is now commonly used to understand the factors influencing the user's acceptance of new technology. TAM is among the leading theories providing a theoretical context that explains the relationship between the attitudes, intentions and behaviour of users (Alfadda & Mahdi, 2021). Osman et al. (2013) concur that TAM helps to predict the factors that have an impact on technology usage behaviour. In other words, it provides a theoretical understanding of why technology users prefer a certain technology. In the current study, TAM is applied to understand the factors that cause primary school teachers to use certain technologies to support their instructional practices. The proponents of TAM identify five variables that determine one's use of technology. These variables comprise the Perceived Ease of Use (PEOU); Perceived Usefulness (PU); Attitude towards Use; Behavioural Intention to Use; and Actual use, as shown in Figure 1.1.



**Figure 1.1:** The Technology Acceptance Model (Turner et al., 2010).

Although the Technology Acceptance Model is made up of five variables, only Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) are believed to be significant determinants of user's decision to use or not to use a certain technology. The Perceived Ease of Use (PEOU) refers to the user's belief that using a certain technology will not require effort (Alfadda & Mahdi, 2021). In other words, teachers who believe that using technology to enhance their

pedagogical practices requires less effort or no effort at all are likely to use technology in their classrooms. Perceived Usefulness (PU) refers to user's belief that a certain technique would improve their job performance (Lazim, Ismail & Tazilah, 2021). To put it differently, teachers are likely to use technology if they believe that it will improve their pedagogical practices. Some teachers might integrate technology in their classrooms because of its affordances, which

include the ability to combine visuals and audio to clarify a lesson. Alfadda and Mahdi (2021) affirm that experience determines users' acceptance of technology. For instance, a good experience of technology may lead to a positive attitude towards it and, ultimately, its use. A negative experience, on the other hand, may result in a negative attitude that, ultimately, results in no use.

TAM was thus deemed suitable for this study because its proponents consider user acceptance of technology as an essential step towards its actual use. This study argues that users' perceptions of technology determine their use of it. TAM, as the theoretical lens of this study, assisted the researchers to analyse and interpret the factors that affect teachers' perceptions of technology integration.

## **Methods**

The following section discusses the methodology used to answer the main research question of this study.

### ***Research paradigm, approach and design***

A research paradigm is made up of overarching principles and conceptions that shape how a researcher perceives and interpret a phenomenon under investigation (Pervin & Mokhtar, 2022). Given the importance of a paradigm in qualitative research, the researchers choose to locate this study within an interpretive paradigm. Interpretive research is based on the premise that social reality is determined by human experience. Therefore, it is perfect for any study on human behaviour (Rehman & Alahart, 2016). For this study, an interpretive paradigm was deemed suitable since the participants' experiences in technology integration are its focus. In accordance with an interpretive research paradigm, a qualitative research approach was adopted. Flick (2014) maintains that a qualitative research approach examines how people make sense of their experiences to understand their social reality. A qualitative research approach enabled the researchers to understand the experiences of the participants in relation to technology integration and how their personal experiences shape their pedagogical practices when they integrate technology. Furthermore, a descriptive

phenomenology research design was deemed suitable for this study. It helped to describe the lived experiences of the participants elaborately and thickly in their own words (Muzari, Shava & Shonhiwa, 2022).

### ***Population, sampling and sampling technique***

The population of a study constitutes a large number of people that a researcher intends to examine or draw conclusions about (Casteel & Bridier, 2021). The population of this study was comprised of primary schools and primary school teachers in the King Cetshwayo District who have integrated technology into their classrooms. From the population, ten primary schools were purposefully selected as the research sites of this study. The ten schools were sampled on the basis that they have technological tools that are used for teaching and learning. From each school, one participant was selected by means of purposive sampling. The ten participants were selected because they teach in the sampled primary schools, and they have integrated technology in their classrooms to enhance their pedagogical practices. Using purposive sampling technique assisted the researchers to select participants with a rich knowledge of and good insights in technology integration. Creswell (2011) commends purposive sampling for enabling researchers to identify and select individuals who are knowledgeable about the phenomenon under investigation.

### ***Data collection method***

The data were collected during a focus group interview lasting 60 minutes. Interviewing a focus group to collect data creates an environment in which individual opinions are easily expressed (Cyr, 2016). During the focus group interviews, the participants shared their thoughts with researchers and their fellow participants. Cyr (2016) contends that focus group interviews allow participants to discuss a complex phenomenon in a more relaxed setting. It also created a space in which the participants shared best practices to integrate technology. Focus group interviews also enabled the researchers to ask follow-up questions to better understand the phenomenon under investigation.

**Biographical data of the participants**

Participants	Gender	Age	Highest qualification	Teaching experience
Participant 1	Female	32	Bachelor of Education	4 years
Participant 2	Male	38	Master’s in Education	12 years
Participant 3	Male	29	Bachelor of Education	9 years
Participant 4	Female	33	Bachelor of Education	1 year 7 months
Participant 5	Male	34	Master’s in Education	11 years
Participant 6	Female	42	Bachelor of Education	10 years
Participant 7	Female	34	Bachelor of Education	7 years
Participant 8	Male	40	Bachelor of Education	13 years
Participant 9	Female	30	Bachelor of Education	2 years
Participant 10	Female	26	Diploma in Education	2 years

**Data analysis technique**

A thematic analysis was applied to analyse data. Braun and Clarke (2006) define it as a technique to identify, code and categorize patterns and themes within a data set. The researchers transcribed the raw data and then read and reread the transcripts to familiarize themselves with the data. As they were reading the raw data, the researchers assigned codes to make meaning of it. The codes were then amalgamated into initial themes. Immaterial codes were collapsed into initial themes. The researchers then refined the initial themes and developed the final themes to report the findings of this study. A thematic analysis allowed the researchers to notice similarities and differences between the responses of the participants.

**Ethical issues**

Ethical clearance was obtained from the academic institution where this study was conducted. The ethical clearance number 2024/10/12/00000252/05/RB appears on the ethics certificate. After the ethical clearance had been received, permission to conduct research in KwaZulu-Natal schools was sought from the provincial education department. The teachers

were requested to participate in the study. Informed consent was obtained from them and the nature of the study was explained so that they could make an informed decision about their participation in the study. The ethical principles such as the right to anonymity and voluntary participation, were explained to participants during the study. Pseudonyms (Participants 1 to 10) were used to adhere to the principle of anonymity.

**Findings**

During data analysis, two themes emerged that were used to report the findings. They are: the role of technology integration in teaching and learning, and technology integration enhances learners’ learning.

**The role of technology integration in teaching and learning**

This theme reports on teachers’ perspectives of how technology integration supports teaching and learning in rural primary schools. Teachers commented that technology enhances teaching and learning. For example, Participant 3 remarked:

*I use a projector to display interactive lesson, allowing learners to engage with digital content such as quizzes.*

From Participant 3's comment, it can be concluded that a technological tool such as a data projector, enables learners to engage with content. When Participant 3 was probed about the kind of engagement that technology integration promotes, she replied:

*It develops learners to be proactive in learning as they enjoy listening to stories from it, pay more attention on the lesson by asking questions to each other and answering questions on their own.*

It is clear from her comment that technology integration encourages learners to pay more attention and interact with their peers. Active participation and interaction improve primary school learners' understanding of content since their peers explain it better than their teachers. The assertion above shows the usefulness of technology in facilitating learners' engagement during the lesson where they listen to stories, ask questions from their peers and collaboratively make sense of the stories they are watching.

It also emerged from other participants' accounts that various technological tools cater for different learning styles. Participant 8 remarked the following:

*Technological tools such as the projectors, are ideal for displaying PowerPoint presentations, infographics, and multimedia content to the entire class. For instance, I use a projector to display a visual diagram when teaching scientific concepts or a video explaining a historical event. The visual component helps reinforce the material and caters to different learning styles*

The assertion above indicates that by integrating technology, teachers can cater for different learning styles. After all, learners have different preferences when it comes to learning. Some learners learn better through visuals, whereas others prefer to learn through sound or text. Participant 8 integrates PowerPoint presentations containing sound, visuals and text to accommodate different learning styles. This

suggests the ease of use of PowerPoint by the teacher since it allows her to combine sound, visuals and text when delivering a lesson. This is nearly impossible in a traditional classroom where technology is not used because teachers in such classrooms rely on learning resources such as charts, printed images and textbooks and they can only combine texts and visuals in those learning resources.

Similarly, Participant 4 perceived technology as tools that allow for different learning formats and accommodate different learning styles. She stated:

*I use a projector to present my lesson for learners when teaching to show learners visuals while listening stories.*

Similarly, Participant 6 mentioned that she found technological tools useful for teaching scientific terms since she can show diagrams. She said:

*I use a projector to display a visual diagram when teaching scientific concepts, or a video explaining a historical event.*

So, Participant 4 blends visuals and storytelling since his young learners can see what is being taught. Infusing visuals in story telling can help learners to not only imagine a story, but also visualize it. This can enhance their understanding of a story. Participant 6 visualizes scientific concepts by means of diagrams. This makes concepts less abstract and easier to conceptualize. Visual representations significantly enhance primary school learners' understanding of content. This is in stark contrast to the days when teachers relied on illustrations in textbooks to make their lessons less abstract.

Furthermore, technology integration makes lesson preparation easier. For example, Participant 2 commented that she used technology to access ready-made lesson plans:

*I download my lesson plans that are well-structured for my teaching that includes learners' activities from school tablet and use a printout using laptop.*

Electronic versions of lesson plans are prepared by the Provincial Department of

Education. These electronic lesson plans save teachers a great deal of time because they do not have to write their own lesson plans. They focus on identifying or developing learning activities that will facilitate learners' understanding of the content. This indicates the usefulness of technology in saving teachers time when planning their lessons. Previously, teachers used to spend a lot of time in writing lesson plans, but nowadays, the integration of technology enables teachers to access the electronic lesson plans prepared by the department of education.

Participant 7 integrates technology to enrich her pedagogical knowledge:

*I use laptop to download teaching materials and to search new methods of teaching on my subject.*

It can be assumed that Participant 7 uses technology to not only access teaching materials that enhance her pedagogical practices, but also learn more about novel teaching methods. Continuous improvement of one's pedagogical knowledge and skills is important in the 21<sup>st</sup>-century classroom because of constant changes in education.

### ***Technology integration enhances learning***

This theme reports on how teachers integrate technology to improve learning in their classrooms. Most teachers mentioned that technology integration increases learner participation. For example, Participant 2 claimed the following:

*It makes the lessons to be more engaging and interactive, and it increases learners' participation. It also expose learners to wide range of learning materials, supporting different instruction.*

Participant 2 suggests that integrating technology in teaching and learning encourages learners to get actively involved in a lesson, which strengthens their grasp of the content. Integrating technology in teaching and learning also exposes learners to a variety of learning materials and enriches their learning experience.

Participant 7 added that:

*The use of technology in teaching and learning has significantly transformed my teaching. Tools like projectors and interactive whiteboards, enable me to display dynamic content videos, images, and infographics that capture the attention of my learners in a way that traditional teaching methods sometimes cannot.*

From Participant 7's comment it can be inferred that technology allows her to enhance her lesson delivery with tools such as images and videos and accommodates her learners' different learning preferences.

Participant 6 noted the following:

*Yes, the use of technology has an impact on learners because it offers them additional content on the subject matter covered in the classroom, enhancing their understanding of the content.*

Participant 6 believes that technology integration allows learners to learn even outside the classroom. She asserts that technology offers learners additional content regarding the subject matter covered in class. So, technology reinforces learning even outside the classroom. Access to content additional to what was taught in class is important for primary school learners who easily forget what they have learned in the classroom. This would make homework much easier since learners do not have to remember what their teacher said in class. Additional content such as online videos, reinforces the content they were taught.

Participant 10 added that integrating technology in teaching and learning increases learners' curiosity levels. He stated that:

*It helps learners to be active in learning as they enjoy watching visuals from the projector and they participate in learning as they ask questions about the lesson. They also respond positively to questions posed to them.*

Participant 10 suggested that technology integration makes learners more inquisitive. The reason might be that it encourages learners to pay attention, as Participant 7 have stated earlier. Learners don't passively receive the content they

are taught, but their minds actively assimilate it. Hence, they ask questions to better understand it.

It also emerged from the participants' responses that integrating technology in teaching and learning minimizes paperwork. Participant 4 observed the following:

*It is decreasing paperwork for us as teachers because you do your lesson planning on laptop, and it improves learners' participation as they see visuals for the laptop.*

Participant's 4 comment shows that technology integration benefits not only learners, but also teachers during teaching and learning. Since technology integration reduces paperwork, teachers have more time to teach and improve learners' learning.

## Discussion

The findings of this study confirm that when it comes to technology integration, teachers act as change agents in South African primary schools. The teachers who participated in this study had positive perceptions of technology integration. They were of the view that technology integration enhances teaching and learning by promoting learners' listening and collaboration skills. Xu et al. (2021) mention that integrating technology in teaching and learning enhances learners' ability to think. This finding highlights the usefulness of technology as a tool to support and enhance primary school teachers' pedagogical practices. The participants also believed that technological tools cater for different learning styles because learners access information in a variety of formats such as educational videos, games, and text that they can manipulate to enrich their learning experiences (Thomas & Schneider, 2020). Learners who learn best with visuals are accommodated through learning materials in image format, whereas learners who learn best with sound are accommodated through learning materials in audio format. It is also evident from the study that technology integration allows teachers to select technological tools that are ideal for primary school learners' learning. Because primary school learners are still young, they prefer to learn by seeing, touching, smelling, and hearing. Indrawati (2021) advises teachers to encourage

young learners to use all their senses to construct knowledge. Different technological tools that engage their senses help them to learn meaningfully. This implies that the teachers embrace technology due to its ability to cater for different learner preferences, and this aligns with the ease of use as propounded by the proponents of TAM.

Furthermore, the participants reported that technology integration extends learners' learning beyond the classroom, which is beneficial to primary school learners. Goh and Sigala (2020) find that technology integration creates a learning environment that supports collaborative and flexible learning since it expands the instructional model beyond the classroom walls and enables learners to interact with their peers. Having access to learning materials beyond the classroom is beneficial to primary school learners because it keeps the content, they have learned in the classroom fresh in their minds. This shows that technology integration is useful to learners as well since it expands their learning to beyond the four walls of the classroom. As Goh and Sigala (2020) suggest, technology integration promotes collaboration among learners and this can be done virtually since in most rural areas, some learners reside in far flanged areas so it is not easy for them to physically meet with their peers after school.

It also emerged from this study that technology integration causes learners to be inquisitive. They ask more questions during teaching and learning to understand the content. Akram et al. (2022) maintain that teachers believe that technology-enhanced teaching supplement their instructional practices. Technology in the classroom not only renders the learning process interactive and exciting, but also motivates learners. Wang (2020) claims that technology integration enables teachers to design lessons that promote active participation. It can be assumed that technology integration arouses learners' interest in a lesson and induces them to ask questions. The participants believed that technology integration benefits not only learners, but also teachers. Lesson preparation is much easier since they access ready-made lesson plans prepared by the Department of Education. Abedi (2023) affirms that teachers use technology to

prepare lessons and direct their instruction delivery. This is in line with the beliefs of the TAM that teachers are likely to accept and integrate technology if they believe that it will enhance their work (Perceived Usefulness).

The findings of this study align with those of other studies about technology integration in particularly primary schools and South African primary school teachers' acceptance of technology. These findings are important because this study was conducted in a rural setting where technology integration is often regarded as distant and superficial. For example, a study by Simuja (2023) explored teachers' experiences of technology integration at South African rural schools. The study finds that some technology immigrant teachers were averse to technology integration because some learners' technological skills were better than their own. The current study's findings contradict those of Simuja (2023) because the primary school teachers who participated in the current study approved of technology integration. These findings correspond with those of a study by Shambare et al. (2022) that also examined the views of teachers at rural secondary schools regarding technology integration. They found that teachers welcomed technology integration. Their perceptions were influenced by the level of training and support they received in the integration of technology. The perceptions of the participants in the current study might be influenced by their age. Most of them were young and had no more than 10 years' teaching experience. Their teacher training programmes may have included technology integration in teaching and learning, hence their amenability to technology integration. Despite this, the general view about technology integration in South Africa is inconsistent. This is evident in the results of several studies showing that some teachers embrace technology integration and others oppose it.

### Conclusion and Recommendations

This study concludes that primary school teachers are starting to embrace technology integration, which determines their perception of it. The findings are that teachers believe that technology integration facilitates learning in the

classroom. Based on the findings of this study, it is recommended that primary school teachers participate in continuous professional development programmes to improve their use of technology in their classrooms. It is further recommended that technology integration promote learner-centred instruction to ensure active learner participation during teaching and learning. Future grade and subject-specific studies should be conducted in similar settings to understand how teachers tailor their technology integration practices for a particular grade and a specific subject in South African primary schools.

### Disclosure

### Conflict of interest

The authors declare that they have no conflict of interest.

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