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## Teachers' perspectives on the use of ICT in the teaching of a South African home language, Sesotho

## ABSTRACT

The study sought to unpack teachers' perspectives of teaching one South African language, Sesotho, as a home language using information and communication technology (ICT) in secondary schools in South Africa. Teachers were recruited to participate in the study by providing lesson plans for analysis. From the analysis, four teachers were selected to participate semi-structured interviews. The in Technological Pedagogical Content Knowledge (TPACK) framework guided the study. The following findings emerged from our analysis of data in the study. Firstly, regardless of having limited ICT resources, teachers nevertheless attempted to use those available in their schools to ensure that teaching does not solely depend on traditional methods. Secondly, teachers in the district studied lacked technological knowledge (TK). In addition, teachers seemed to lack knowledge of ICT policies. Finally, lack of Sesotho content on ICT resources affects the adoption of ICT in the teaching and learning of Sesotho. We recommend that in addressing the issue of the digital divide, there is a need to focus on provision of ICT resources to all schools, irrespective of quintile level, and to provide teachers with proper training, focusing on Sesotho and other African languages as subject.

*Keywords:* information and communication technology; Sesotho teaching; teachers' perspectives; technological pedagogical content knowledge

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## 1. Introduction

The use of information and communication technology (ICT) has increased in the past few years, in both developed and developing countries alike. As the relevance of ICT increases across various areas of life, an understanding of its use by teachers for subject teaching becomes urgent. This study focused on ICT tools such as; computers (desktops, laptops), photocopy machines, data projectors, interactive whiteboards, Word Processing, Internet, tape recorders, cell phones and social media apps, specifically WhatsApp which are used for the purpose of teaching and learning. ICT has become more than an item of study: it is constantly utilised as a learning tool around the world to "discover, evaluate, store, produce, present, and exchange information regarding the curriculum" (Gil-Flores, Rodríguez-Santero & Torres-Gordillo, 2017:441). It is therefore important to understand how well teachers can integrate ICT into the teaching and learning of subjects. Being a teacher comes with several responsibilities, such as daily lesson preparation, conducting the teaching and learning process in the classroom, assessment, classroom management and taking part in extra-curricular school activities. The teacher should be able to deliver the subject content to the learners and ensure that they obtain good results in the subject they teach. According to Olivier (2016), recently, due to opportunities and technological skills, there is a pool of teachers who play different roles in supporting learners in different areas of teaching and learning. The author continues by stating that this pool of teachers will be exposed to different responsibilities, which includes using ICT skills and knowledge for teaching.

The demand for teachers to integrate ICTs into their teaching has increased due to the ability of ICTs to enhance and improve the teaching and learning of various subjects, including Sesotho. Although this is the case, "the readiness of schools to effectively integrate ICT in the teaching and learning, and of teachers in terms of knowledge and skills has not been fully explored" (Ngeze, 2017:424). It is for this reason that we seek to explore teacher perspectives on the demands imposed on them regarding the integration of ICTs for teaching and learning. In addition, Alkamel and Chouthaiwale (2018) state that it is important that teachers are well trained and prepared for them to be capable of integrating ICTs into their practice.

In South Africa, schools are classified into quintiles according to the socio-economic status of the areas where they are based (South African Schools Act No. 84, 1996). The schools in quintiles 1 to 3 are no-fee schools and are therefore wholly subsidised by the government. These are the schools that are mostly found in rural and township areas. Those in quintiles 4 and 5 are fee-charging schools and are partially subsidised by the government. In most the schools in the poor communities, which depend on government for funding, experience the unavailability of resources, including ICTs. Learners in such schools remain digital immigrants because of the lack of ICT resources such as computers, internet and projectors (Du Plessis & Webb, 2012). It is therefore important to conduct this study because it addresses the issue of the digital divide and how it affects the integration of ICTs into teaching and learning in South African schools.

Teachers' attitudes towards integrating ICTs into their teaching is highly influenced by their perspectives on the matter. Attitude has the power to determine a person's behavior and understanding of a particular matter. The attitude of teachers towards ICT as a new way of doing business is a fundamental factor in determining their willingness to integrate it into their classroom practice (Jimoyiannis & Komis, 2007; Bas, Kubiatko & Sünbül, 2016). Fu (2013:118) supports this view by affirming that "teachers' attitudes towards technology significantly predict teacher and student technology use, as well as the use of a variety of instructional strategies". Although that is the case, the attitude of teachers towards ICT as a teaching tool in Sesotho is not fully understood. This is the reason why the study seeks to address teachers' understanding of ICT integration into the teaching and learning of Sesotho.

Most learners these days are regarded as "digital natives" because they are a generation that is technologically driven. This is because they were born in the digital era, where they have been exposed to various technologies around them (Prensky, 2001). South African context, many students are "digitally literate" when it comes to using mobile phones and social media applications, which in most cases are hardly used for educational purposes. However, not many are "digitally literate" when it comes to the use of computers and laptops – especially students who come from a lower socio-economic background. Salubi (2021) attests that with the digital divide experienced in the country, the learners' performance is likely to differ as those who are advantaged are more likely to perform well than others.

According to Bingimlas (2010:238), "many teachers who do not consider themselves as well skilled in using ICT feel anxious about using it in front of a class of children who perhaps know more than they do." This contributes to why many teachers stick to their traditional pedagogical practices and avoid using ICTs in the classroom. Çalışkan & Caner (2022) affirms that teachers with more experience are likely to have a negative attitude towards the use of ICT for teaching and learning compared to those with a few years of experience in the field. It could be because the recently qualified teachers have been exposed to the use of modern ICT resources during their years of training in higher learning institutions. In addition, Prensky (2001) affirms that most older teachers, who are referred to as "digital immigrants", lack understanding of the learners' perspectives on the use of technology and are not prepared to assist learners who may improve their performance using technology.

To achieve educational goals when teaching the digital natives, not only should teachers and learners be able to use technology to teach, but they should also be able to access the teaching and learning resources using different ICT tools. Unlike the traditional methods of learning, digital natives do not rely on teachers as the primary source of information; rather, they are exposed to different sources of information and can have access to it anywhere, anytime using the internet (Kivunja, 2014). However, African languages, such as Sesotho, seem to be confronted by many challenges in this regard. These languages have become increasingly important, especially after independence in 1994, and are now taught as subjects in many schools. While literature has it that people around the world can access information on different ICT resources in English and other Western languages, the situation is not the same with African languages such as Sesotho (Maseko et al., 2010). The ground assumption in the current study is that, for schools to embrace ICT as an aid for teaching African languages, the extent to which schools are materially resourced to embrace ICT as a teaching tool in Sesotho must be better understood. In other words, there seems to be challenges on accessing educational resources for the teaching and learning of Sesotho. In addition, teachers should adequately prepare in terms of both their attitude and skills. In other words, teachers should have a proper attitude and skills to work with ICT as an aid to their teaching activities. The present study therefore focuses on exploring the challenges experienced by teachers when integrating ICT into the teaching and learning of one African language, Sesotho, in South Africa, to close the knowledge gap as identified in this section.

The aim of the study is to explore the perspectives of Sesotho language teachers on integrating ICT into the teaching and learning of Sesotho. The study is guided by the following questions:

- What are teachers' views and understandings of ICT integration into the teaching and learning of Sesotho?
- What are the challenges encountered by Sesotho teachers in integrating ICT into their classroom practice?

## 2. Theoretical Framework

This study is informed by the Technological Pedagogical Content Knowledge (TPACK) framework. This framework builds on Shulman (1987), where pedagogical content knowledge (PCK) is used to "describe how teachers' understanding of educational technologies and PCK interact with one another to produce effective teaching with technology" (Koehler & Mishra, 2009:62). According to Koehler, Mishra and Cain (2017), the TPACK model consists of the three main components of teachers' knowledge. The first is content knowledge (CK), which refers to knowledge about the subject matter, in this case Sesotho. Secondly, there is pedagogical knowledge (PK), which is based on the teacher's knowledge and application of teaching methods and everyday teaching and learning processes that take place in the classroom. The last component is technologies for the purpose of teaching and learning. The framework does not focus on the three main knowledge concepts individually, but rather on the interaction between them, as displayed in Figure 1.



#### Figure 1: TPACK model (technological pedagogical content knowledge)

Adapted from Mishra and Koehler (2006:1025)

The TPACK framework focuses on how teachers connect their technological, pedagogical and content knowledge (Thompson & Mishra, 2007). According to Archambault and Crippen (2009:7), "TPACK involves an understanding of the complexity of relationships among students, teachers, content, technologies, and practices." This study explores ways in which teachers of Sesotho understand and practice the integration of ICTs into the teaching of content. Teaching has evolved over several decades in the availability of tools used to impart knowledge and in teachers who are trained to teach. The changes in the teaching profession have escalated the complexity of the teaching process, namely "understanding of content, understanding of teaching and understanding of technology" (Koehler & Mishra, 2009:67). Thus, the TPACK framework guided this study on teachers' perspectives on the teaching of Sesotho with the use of ICTs. The TPACK framework guided this study in unpacking different knowledge components and allowed us to make sense of how teachers integrate these components into the teaching of Sesotho content.

## 3. Literature Review

#### The language issue in South African education

Language is one of the aspects that contributes to the rich cultural diversity of South Africa. Although the country has 11 official languages, their usage in society is more related to power, status and class (Gudmundsdottir, 2010) and this is becoming a norm even in the education system. Mda (2018:366) states that "resistance to the official use of indigenous African languages as language of instruction has surfaced among South Africa's African majority, many of whom contend that their children should be exposed to and immersed in English, which is rapidly becoming the language of commerce and politics in South Africa, as early as possible".

In the context of South Africa's official education policy, the language of instruction from grades 1 to 3 is the learners' mother tongue. From grades 4 to 12, learners will then be instructed in English or Afrikaans, and their mother tongue will be one of the subjects that they are taught in school as a home, first or second additional language. Most South African learners' mother tongues is one of the indigenous languages; Sesotho is one of those. The transition from having mother tongue as a language of instruction to having English or Afrikaans as a language of teaching and learning comes with challenges and requires learners to be well prepared, as "neither adequate support materials nor additional support is provided in the transition period" (Gudmundsdottir, 2010:176).

The use of ICTs is thus important as it enables teachers to explore different teaching resources to ensure that teaching and learning take place effectively. For example, if a school does not have textbooks, ICTs can be of assistance to ensure that teaching and learning continue to take place through other teaching resources. These include using the internet to search for information; PowerPoint and Microsoft for presentations; and cell phones and social media to share information. It is difficult to achieve this with Sesotho, though, because, as Olivier (2016:7) states, "despite the existence of some online content, the amount of content and academic discourse in Sesotho is limited." The author continues to state that besides a few "online resources", literature is silent about the "Sesotho internet language landscape". Therefore, it is important to explore Sesotho language teachers' understanding and challenges in using different ICT resources during the process of teaching and learning Sesotho, as well as how their use can assist in ensuring improvement in the language as a subject taught at schools.

## 4. Methodology

#### Research approach

A qualitative research approach was employed in this study and applied to in-service teachers' perspectives on the integration of ICTs for teaching the home language, Sesotho. This research approach "deals with the underlying qualities of subjective experiences and the meanings associated with phenomena" (Du Plooy-Cilliers, Davids & Bezuidenhout, 2014:229). This approach enabled us to explore teachers' understandings and challenges regarding ICT integration into their teaching activities.

#### Research design

A multiple case study was employed as it allows for the systematic investigation of the phenomenon under study to enable the researcher to gain in-depth knowledge (Rule & John, 2011). In this study, ICT integration into the teaching and learning of Sesotho was regarded as a case in which participants needed to voice their own perspectives. The purpose was to source in-depth knowledge on the participants' understandings and challenges in integrating ICTs into the teaching and learning of Sesotho and how the integration can be improved. A multiple-case-study design was adopted as it enabled the researchers to generate data using several methods, such as interviews and document analysis (Rule & John, 2011; Creswell, 2014).

#### Sampling procedure

Table 1 presents a summary of the lesson plans received from the twelve prospective participants, of which four were selected to further participate in interviews.

Quintile	Prospective participant	Number of lesson plans per file	Single file per phase (grade)	Number of ICT tools per file
1	1	10	SP (8)	2
	2*	4	SP (8)	5
		3	FET (12)	5
	3	8	SP (4)	0
2	4	11	FET (11)	0
	5	9	IP (4)	0
	6*	4	FET (10)	5
3	7	8	FET (11)	0
	8*	7	FET (12)	7
	9	10	FET (10)	0
4	10*	5	FET (10)	5
		5	FET (11)	7
	11	10	FET (11)	3
	12	11	FET (11)	3

*Table1: Single files with lesson plans (January to May 2019) per quintile per prospective participant* 

**Key:** \*Lesson plans with evidence of the combination of ICT tools and thus selected for interviews; SP – senior phase; FET – further education and training phase.

Table 1 above presents information on the 12 twelve participants who were invited to participate in the study and their lesson plans. The participants teach the Sesotho Home language in Grades 8-12, where learners are mostly aged between 13 and 19 years. Four participants (2, 6, 8, and 10), each representing a different quintile (from 1 to 4), were requested to further participate in the interviews. These participants' lesson plans show evidence of frequent ICT usage. The use of ICT tools by participants was identified by an indication of the ICT tool in the lesson plan, therefore each tool indicated was counted. The study focused on the perspectives of teachers who had at least five years of experience teaching Sesotho as they were more likely to have experience in both traditional and innovative ways of teaching.

#### Data collection instruments

This study employed semi-structured interviews as well as two data sources, namely lesson ( plans (see Table 1 above) and policy documents namely; the CAPS document and incremental introduction of African languages in South African schools' policy (refer to Table 2) as data collection instruments. Maree (2016:120) states that "there are multiple realities that people have in their minds; the different insights gained describe different perspectives that all reflect the unique reality and identity of participants". Employing these different data collection instruments enabled us to attain a more substantive picture of the reality and understanding of the phenomenon under study (Berg, 2007).

#### Data collection procedure

Firstly, lesson plans were collected from participating teachers to address the research problem. According to Flick (2009:259), "documents represent a specific version of realities constructed for specific purposes." The lesson plans served to clarify the participants' understandings and use of ICTs in the teaching and learning of Sesotho and contributed to the development of the interview schedule. Finally, a sample was selected for interviewing. The first researcher selected those participants whose lesson plans indicated employment of ICTs in terms of materials (ICT resources / tools used for the lesson), procedure (The manner in which they were used, and assessment (ICT usage for assessment purposes).

Secondly, the semi-structured interviews were recorded and transcribed; the first researcher also took field notes during the interviews. During the interviews, participants expressed their understanding and challenges of integrating ICTs into the teaching of Sesotho as home language. We were able to comprehend what shaped the participants' perspectives on the integration of ICTs into the teaching of Sesotho. The participants were provided the opportunity to share their ideas at length with the first researcher, whose purpose was to listen and take note of the ideas without being critical (Denscombe, 2010).

Finally, a document analysis was performed through analysis of education policy documents. The two policy documents that were analysed were the Curriculum and Assessment Policy Statement (CAPS) and the incremental introduction of African languages (IIAL) in South African schools. The documents were obtained through internet searches.

#### Data analysis

Data from the lesson plans, interviews and policy documents were used for triangulation to ensure credibility and to enable us to identify themes (Creswell, 2014). The data analysis procedure involved reading through the field notes, coding the data and categorising them into themes. Data were structured into emerging themes, subthemes and categories.

#### Ethical considerations

The study was carried out after the ethics committee of the Faculty of Education at the University of the Free State had approved it in terms of ethical clearance. The Free State Department of Education (FSDoE) also granted permission for the study to be conducted in selected schools within the district. Prior to the interviews being conducted, participants signed consent forms to show their willingness to participate in the study. The consent forms were signed after the first researcher had thoroughly explained the purpose of the study to the research participants, who were also advised that they retained the right to withdraw from the study if at any point in the study they felt like doing so. Effectively, this means that research participants were given the opportunity to make an informed decision regarding their participation in the study (De Vos et al., 2011).

According to Yin (2018), to ensure privacy and confidentiality of data sources, participants' real names and places of work (schools) are not mentioned. The name of the selected district is also not made known in the study. The four teachers who participated were named Participant 1 to 4, respectively.

## 5. Findings of the Study

This section interprets the teachers' perspectives on the use of ICT into the teaching of Sesotho. The intention is to answer the research questions stated earlier in the study. The following themes were generated from the data: Present preferred teaching methods, challenges of integrating information and communication technology into the teaching and learning of Sesotho and data emerging from the Curriculum and Assessment Policy Statement (CAPS) and the incremental introduction of African languages (IIAL) in South African schools' policies.

## Present preferred teaching methods

To answer the first research question (What are teachers' understandings of ICT integration into the teaching and learning of Sesotho?), participants had to indicate their preferred teaching methods and the reason for their preferences. Participants narrated how they currently preferred teaching Sesotho. They did so by explaining the teaching method(s) they preferred when teaching Sesotho and the reason(s) for their preference:

I think the combination of both would be benefiting us all. The learners benefit given the fact that they come from different backgrounds. Their need for variety cannot be overemphasised. There is that learner who would be coming from some sort of disadvantaged economy/social background. Now, the learner would be advantaged. But some other learners would be having access from such tools from home. Therefore, variety makes me reach out to those learners equally. (Participant 1) I prefer the combination of the traditional methods of teaching as well as the use of ICT in my classroom because the school in which I work does not have enough resources, such as textbooks, and then we lack on hardcopies. So, sometimes I project the work on the overhead projectors and then I give my learners the softcopies through the WhatsApp group to do the homework at home. (Participant 2)

Personally, I prefer to use option 3, which is the combination of both traditional and computer-based teaching. My reason for that is that it's always convenient to use the two because now you always have a plan that if these fails, then at least you have the other one in place for that one. Let's say if ... we currently facing load shedding, if the ICT one fails – there is no electricity, no internet connection for that day – I still have my chalkboard and textbooks. (Participant 3)

I prefer the last one, which is a combination of traditional and integration of ICT. When you bring ... the new technology into teaching, it must not do away with the traditional way of doing things. 'Cause you see, when you teach Sesotho as home language, you need to ensure that learners ... get the basics. They need to know exactly where we come from with using the language for them not to lose focus on the content of the subject when they are now learning with technology. (Participant 4)

All participants indicated that they preferred to use a combination of traditional and computerbased teaching, with each participant having their own reason for their preference. Participants 1, 2 & 3 respectively, who teach in quintile 1-3 schools indicated that their preference is influenced by the socio economic status of their schools. The literature in this study affirms that quintile 1-3 schools are non-fee-paying schools which are based in rural and townships. The participants indicated that their choice of preferring both the traditional and ICT based teaching is because of reasons such as the possibility of learners not having their own ICT tools, lack of resources such as textbooks, power cuts and no internet access.

## Challenges of integrating information and communication technology into the teaching and learning of Sesotho

This section addresses the second research question (What are the challenges encountered by Sesotho teachers in integrating ICT into their classroom practice?). The participants alluded to lack of TK and teachers' lack of knowledge on ICT policies/ guidelines for Sesotho teaching as the challenges.

#### Lack of technological knowledge

Participants narrated how they have experienced technological problems with integrating ICTs into the teaching of Sesotho due to a lack of knowledge.

I don't know how my learners are able to download the books, the prescribed books, to their phones. But they have that way, Mme (Mam); they actually have them on their phones. I don't know how they are able to get that, but, for me, I am not able to get that. (Participant 1)

It takes time to connect and to prepare the equipment before the class resumes, and then it requires certain expertise and technical knowledge to project the work in there. (Participant 2)

There are learners whom, when you teach through this technology, they are very slow. So, they will take time to make a link with this. Sometimes while you are doing the technological part, they will tell you about the textbook. *Bana ha ba Tshwane, akere?* (Learners are not the same, right?). (Participant 4)

The finding above makes it clear that participants have encountered different challenges due to lack of TK. Each participant mentioned a different challenge, such as lack of knowledge on how to download teaching and learning material, how using ICT is time consuming, and the learners' TK. This could be due to the differences in context (such as the availability of ICT tools in their schools) and their individual use of ICTs. The participants alluded to the lack of knowledge on operating technological devices that hinders the process of integrating ICTs into the teaching of their subject, Sesotho.

#### Teachers' lack of knowledge on ICT policies/guidelines for Sesotho teaching

Participants were asked to comment on the ICT policies that guide them in their teaching of Sesotho. They responded as follows:

I don't know of any ... well, for me, it is a matter of passion and love for technology. I happen to love it and to keep in line with new developments as far as technology is concerned. (Participant 1)

*Honajwale* (right now), we do not have any policies regarding ICT in the teaching of Sesotho. So now, I am only following the curriculum and assessment policy statement on Sesotho. (Participant 2)

I do not know of any policy that guides teachers in teaching Sesotho using ICTs. ... There are no specific CAPS documents for ICT. But we normally use the CAPS document for Sesotho that are there. (Participant 4)

All participants in this study indicated that they did not know of any policies guiding them on the use of ICTs in teaching Sesotho.

#### Availability of online Sesotho information

The participants narrated their perspectives on the issues of availability of online Sesotho information as one of the measures that could improve the teaching and learning of Sesotho.

If we would somehow upload Sesotho dictionary, Sesotho books or whatever material to the cloud and so that we can be able to reach it, it would benefit us all. If, somehow, as a school, we would not only rely on buying the hardcopies, but we would also buy softcopies, it would be easy for us to share the information with other learners. It is high time that schools should do that. (Participant 1)

I think it is each teacher's dream to see an online Sesotho. The online content of Sesotho for teachers and learners, so that the teachers and the learners can have access to Sesotho content that is available online. And then we can also have the resources such as the computer labs at schools that provides for Sesotho lexicography. (Participant 2)

I would suggest that if more online, let's say – I would give you an example – ebooks, if e-books would be placed and readily available for learners to be able to access the online information that is in Sesotho and not in English, where we now must work to translate. The information is available, but now we must translate everything we get in Sesotho. (Participant 3)

If most learners throughout the country, they can access textbooks in their tablets, this is very important, because teaching is going to be very easy. (Participant 4)

All four participants shared the same sentiment regarding the availability of online Sesotho content. They all have an understanding that more online Sesotho content could be beneficial and would make teaching and learning of the subject more effective as there will be much more information about it online. Participants mentioned that having online Sesotho resources would benefit schools more than using only hardcopies.

## Data emerging from the Curriculum and Assessment Policy Statement (CAPS) and the incremental introduction of African languages (IIAL) in South African schools' policies

Table 2 presents the data from the CAPS document, with specific focus on the aims and/ or goals of the policy and expectations from teachers and learners.

Category	Content
Document	South Africa. Department of Basic Education (DBE). 2011. <i>Curriculum and Assessment Policy Statement (CAPS)</i> . Pretoria: Government Printer.
Emerging data from the policy	The National Curriculum Statement Grades R–12 aims to produce learners that are able to: Use science and technology effectively and critically showing responsibility towards the environment and the health of others.
Expectations from teachers	Resources needed for the teaching of Sesotho home language as one of the subjects A teacher must have: A CAPS document, Language in Education Policy (LiEP), learners' textbook and other additional learning material, prescribed literature books (novel, drama & poetry, dictionaries), and transactional resources (newspapers, magazines and brochures).
Expectations from learners	Resources needed for the learning of Sesotho home language as one of the subjects A learner must have: Learners' textbook, prescribed literature books (novel, drama & poetry), dictionary and transactional resources (newspapers, magazines and brochures).

 Table 2: Data emerging from the CAPS document

Table 2 presents the data from the CAPS document. The policy stipulates that the aim of the DBE is to produce learners that can use science and technology effectively and critically, showing responsibility towards the environment and the health of others. The ability to use science and technology effectively does not imply, however, that ICT integration into the teaching of the subject is taking place. The CAPS document is silent about the integration of ICTs into the teaching and learning of subjects.

Table 3 below presents the data from the IIAL in South African schools' policy, with specific focus on the aims and/or goals of the policy and expectations from teachers and learners.

Table 3: Data emerging from the incremental introduction of African languages ir
South African schools' policy

Category	Content
Document	South Africa. Department of Basic Education (DBE) 2013. <i>The</i> <i>incremental introduction of African languages in South African schools.</i> <i>Draft policy</i> . Pretoria: DoE.
Emerging data from the policy Expectations	<ol> <li>The main aims of the policy</li> <li>Improve proficiency in and utility of African languages at home language level, so that learners can use their home language proficiently.</li> <li>Promote social cohesion and economic empowerment and expand opportunities for the development of African languages.</li> <li>Provision of resources</li> </ol>
from teachers	The CAPS and the DBE workbooks are available for both the home and the first additional language levels for all official languages. The national catalogue contains textbooks and readers for home language in all official languages.
Expectations from learners	<b>Provision of resources</b> The DBE workbooks are available for both the home and the first additional language levels for all official languages. The national catalogue contains textbooks and readers for home language in all official languages.

Table 3 displays information from the IIAL in South African schools' policy. The policy supports the improvement of the quality of the teaching and learning of African languages in schools. As shown in the table, the main aims of the policy are to: improve proficiency in and utility of African languages at home language level, so that learners can use their home language proficiently; and promote social cohesion and economic empowerment and expand opportunities for the development of African languages as a significant way of preserving heritage and cultures. The policy, however, is silent about the integration of ICT in the teaching and learning of African languages

## 6. Discussion of Findings

#### The perspectives of teachers

We found that all participants preferred using a combination of traditional and ICTintegration methods even though they each applied these methods differently in their lessons. Although some participants were from schools that are less equipped with ICT resources, they still ensured that they utilised the resources that are available to teach Sesotho. The no-fee schools (quintile 1-3) are completely funded by the DBE for their needs, such as teaching and learning materials, water and electricity as well as maintenance (Maistry & Africa, 2020). The participants alluded to the fact that they experienced challenges. This included lack of materials even for traditional methods of teaching, such as chalk and textbooks; electricity cuts; and lack of ICT tools for teaching and learning.

# The problems of the perceived reality on the practice of using ICT in the teaching of Sesotho

Participants narrated how they have experienced technological problems when using ICTs during the teaching and learning of Sesotho due to a lack of knowledge. They explained that the lack of information on operating technological devices hinders the process of using ICTs in the teaching of their subject, Sesotho. In addition to this, Chisango et al. (2020), as also supported by Chisango and Marongwe (2021), argue that teachers refrain from using technology when teaching due to the lack of digital knowledge and this results in some teachers and learners missing out on useful online learning activities. Furthermore, the learners' inability to integrate ICTs into learning hinders them from being part of the process. Chigona and Mooketsi (2011) argue that it is not only teachers who lack TK for teaching, but also many learners require knowledge on how to learn using technology. It is evident that the use of ICT in the classroom requires both teachers and learners to have adequate TK, hence there is a need for teachers and learners to be adequately trained in using ICT for teaching and learning purposes.

#### Effectiveness of the education policy documents

All participants in this study indicated that they did not know of any policies guiding them on the use of ICTs in teaching Sesotho. They seemed to depend on the CAPS document for guidelines on how to teach Sesotho. It can therefore be concluded that participants used the CAPS document because they are familiar with it, as the ICT policies for the teaching of Sesotho seem to not exist. The finding corroborates that of Vandeyar (2013) that the lack of access to education policy results in a deficit of policy implementation. One of the aims of the National Curriculum Statement (NCS) is "to produce learners that use science and technology effectively and critically showing responsibility towards the environment and the health of others" (South Africa. DBE, 2011:5). Although the policy provides guidelines on how Sesotho content should be taught, it is silent about the use of ICTs when teaching the content. There is a lot of emphasis on the importance of ICT integration for teaching and learning. However, there is evidence of disjuncture between ICT policies and language policies in education. Like the CAPS document for Sesotho home language (grades 10–12) (see Table 2), the IIAL in South African schools document indicates CAPS, prescribed DBE workbooks, textbooks and readers as the resources that should be used for the teaching and learning of African languages (see Table 3). It is surprising that the policy aims to improve proficiency in and utility of African languages at home language level as well as to promote social cohesion and economic empowerment and expand opportunities for the development of African languages yet encourages traditional pedagogical practice. The resources mentioned in the policy (see Table 3) do not include ICTs. The policy is therefore as silent as the CAPS on the integration of ICTs into the teaching and learning of African languages.

#### Sesotho online educational resources

Access to Sesotho online resources on ICT platforms such as the internet continues to be a challenge to teachers and learners. The participants narrated the challenges that they experienced due to the shortage of online information in relation to Sesotho content. They understood that there is a need for online teaching and learning material such as textbooks and dictionaries for Sesotho. Their understanding could be influenced by the developments brought by technology, which assist in saving money and time and in making the learning material more accessible. The participants might have witnessed this as one of the effective teaching and learning strategies from other subjects and/or institutions of learning. Participant 3 explained that there is useful information online, although it is uploaded in English, with teachers having to translate the information when they need it. Maseko et al. (2010) share the same sentiment, stating that people around the world can access information on different ICT resources in English and other Western languages, but not in African languages such as Sesotho. Omogola (2009) mentions that Microsoft Office does not prioritise African languages as it does with English because they are regarded as "economically unviable". Similarly, Ndebele (2014) affirms that access to ICT favours those who know and understand English and other Western languages. As a result, the challenge of the digital divide in education continues to grow due to social division between those who can benefit from the use of ICT and those who cannot (Omogola, 2009).

## 7. Conclusion

This paper explored teachers' perspectives on the use of ICT in the teaching of a South African home language, Sesotho. The purpose of the study was to unpack teachers' views and understanding of teaching Sesotho as a home language in selected secondary schools (grades 8–12) within a district. The findings indicate the challenges

of ICT integration for the teaching of Sesotho. The unequal distribution of ICT resources creates unequal opportunities for teachers and learners to benefit from using different learning platforms that could improve the learning experience and learner performance in the subject. In addressing the issue of the digital divide, the DBE needs to prioritise all schools, regardless of quintile level, when distributing ICT resources. The DoE and schools need to ensure that teachers receive training and support, with specific focus on Sesotho and other African languages as a subject(s) and ensure sustainability in the process by ensuring that it is continuous and that progress is monitored. We therefore recommend that the DBE and schools should monitor and evaluate teacher training and development on ICT usage in the teaching of subjects such as Sesotho. We believe that such an initiative will assist to identify teachers' progress in using ICT to teach, identify the challenges that they continuously come across, and maintain developing them for the continuously evolving technology.

## 8. Limitations and Recommendations for Future Studies

There were various limitations that could have affected the outcomes of this study. Firstly, the lesson plans collected and analysed were for one semester only. Therefore, there was no comparison with lesson plans from other semesters to analyse use of ICTs in lessons. In addition, a teacher's use of ICTs could change from time to time depending on several factors, such as preferred methods of teaching and school context. Despite this limitation, we collected data from participants working in different contextual settings (quintiles 1 to 4) to gain insight on their perspectives. The data collected in the study are not limited to participants' perspectives on the teaching of Sesotho during the period of the analysed lesson plans only, but rather on a daily basis.

The study focused on the perspectives of teachers who had had at least five years of experience teaching Sesotho. A comparative study on the perspectives of teachers with less than five years of Sesotho teaching experience may provide more insights on the issue under study because teachers with varying years of experience may have different views, understandings and experiences.

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