

**SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING ICT TOOLS  
IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT**

By

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## **SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING ICT TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT**

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## **DEDICATION**

- In memory of my late Father (Samuel Dinga), Sister (Nomfanelo Dinga) and Brother (Ernest Bantubonke Dinga).
- To my daughter, Liyema Anesu Dinga, this is for you.

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## ABSTRACT

This study explored Social Sciences teachers' experiences in integrating ICT tools into their teaching pedagogies in Tshwane West District, in Gauteng Province. A qualitative and phenomenological approach was employed to explore participants' lived experiences. The study was steered by the interpretivist research paradigm and the Technology Acceptance Model framework. The study was conducted with 12 Social Science teachers and 3 departmental heads who were purposively sampled. A total of 15 participants were purposively selected. Data were gathered through semi-structured interviews and were analysed thematically. The findings revealed that there is uneven integration of ICT tools due to limited ICT tools, a lack of teacher professional development, low teacher confidence, insufficient support from the school management, and policy implementation. The findings further indicate that more support, continuous training and access to technological tools are required to facilitate the successful integration of ICTs in the teaching of Social Sciences, especially in the Tshwane West District of Gauteng Province, South Africa.

**Keywords:** ICT tools; Social Sciences teachers; teacher experiences; teaching pedagogies; Technology Acceptance Model; qualitative phenomenological research.

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## ACRONYMS

|         |                                                                                  |
|---------|----------------------------------------------------------------------------------|
| CAPS    | Curriculum and Assessment Policy Statement                                       |
| DBE     | Department of Basic Education                                                    |
| DoE     | Department of Education                                                          |
| GC      | Google Classroom                                                                 |
| GDE     | Gauteng Department of Education                                                  |
| GEP     | Google Education Project                                                         |
| GET     | General Education and Training                                                   |
| GOP     | Gauteng Online Project                                                           |
| ICT     | Information and Communication Technology                                         |
| ICT4RED | Information and Communication Technology for Rural Education Development Project |
| ITEP    | INTEL Tech Education Programme                                                   |
| KP      | Khanya Project                                                                   |
| LTSM    | Learning, Teaching, Support, and Materials                                       |
| MPL     | Micro Partnership Learning                                                       |
| NDP     | National Development Programme                                                   |
| PEOU    | Perceived Ease of Use                                                            |
| PLC     | Professional Learning Community                                                  |
| PU      | Perceived Usefulness                                                             |
| SGB     | School Governing Body                                                            |
| SMT     | School Management Team                                                           |
| SNP     | School Net Project                                                               |
| STEM    | Science, Technology, Engineering, and Mathematics                                |
| TAM     | Technology Acceptance Model                                                      |
| UNESCO  | United Nations Educational, Scientific and Cultural Organisation                 |
| UNISA   | University of South Africa                                                       |

## **CHAPTER 1: INTRODUCTION AND BACKGROUND OF THE STUDY**

### **1.1 Introduction**

Information and Communication Technology (ICT) has contributed to the development of communication, knowledge creation and information dissemination across sectors, including education. Rapidly evolving digital technology, together with the disruptive experiences of education during the COVID-19 pandemic, has accelerated the infusion of ICT into teaching and learning worldwide. However, as education systems become more digitised, teachers are responsible not only for having subject knowledge but also for embedding technology that enhances teaching practices, learner engagement and educational outcomes.

The use of ICT in teaching historical events, geographical concepts, multimedia resources, simulations, and real-world information through interactive classrooms in a learner-centred manner is possible in the social sciences. It is well known that ICT enhances learners' performance due to its motivation, active participation and in-depth conceptual understanding (Zungu, 2022:11). Nduwanyezu and Nzabaliraw (2022:61) argue that ICT develops skills such as collaborative learning, critical and problem-solving thinking and life-long learning skills which are essential components of twenty-first century education. Pico and Rodríguez (2021:4130) further argue that ICT transforms learners from passive receivers of knowledge into active participants in the learning process, and Wordu (2021:73) emphasises the role of problem-solving in improving education on the global level in terms of quality, accessibility and efficiency.

Many education systems around the world consider ICT as a significant strategic imperative in terms of educational reform and transformation. China, the United States, Japan, South Korea and several European countries are still investing heavily in digital education to better prepare students for knowledge-based economies (Wang et al., 2022:60-63). Likewise, national ICT projects introduced in Rwanda, focus on improving equitable access to quality education at national level and the digital capacity development of teachers and learners (International Labour Organisation, 2023:1). Within South Africa, the Department of Basic Education has been implementing a number of initiatives to strengthen technology-enhanced teaching and learning to redress historical imbalances and further elevate the quality of education (Graham, Stols & Kapp, 2020:750).

These developments notwithstanding, the successful incorporation of ICT in classroom practice remains inconsistent. Although many public schools in the Tshwane West District have been provided with technological resources through the initiatives of government and the private sector, the extent to which these resources are incorporated in the daily teaching practices, particularly in the Social Sciences classrooms, varies greatly. Teachers still face challenges with regard to infrastructure, professional development, confidence in the use of technology, institutional support and the practical integration of ICT in their pedagogical practices. These contextual realities motivated this study, which explored the experiences of Social Sciences teachers integrating ICT tools into their teaching pedagogies in the Tshwane West District of Gauteng Province, South Africa.

This chapter introduces the study by presenting the background to the research, the problem statement, the research questions, the aim and objectives. The chapter also addresses the theoretical framework, the definition of key concepts, the preliminary literature review, the research methodology, ethical considerations, the limitations of the study, and the chapter outline.

## **1.2 Background to the study**

The use of ICT has become an important part of teaching and learning. The education system is facing the task of teaching learners in such a way that they acquire the knowledge, digital skills and critical thinking skills necessary for success in a rapidly changing society. Governments have invested in digital technology to improve teaching methods, increase the availability of teaching resources and develop an educational environment adapted to the needs of 21st-century learners. Throughout existing literature, it has been demonstrated that ICT, when used intentionally in the classroom, can facilitate learners to participate more, work collaboratively as well as deeper conceptual understanding (Nduwanyezu & Nzabaliraw, 2022:62; Saputra & Wahid, 2025:31). Yet when technology does exist, it does not necessarily mean a meaningful classroom integration, especially at a time when effectiveness of the technology implementation relies heavily on teachers' ability, willingness and confidence to integrate technology.

Internationally, countries have adopted different strategies to strengthen ICT integration within their education systems. Nations such as the United States, China,

Japan, Germany, and South Korea continue to invest heavily in digital infrastructure, teacher development, and curriculum reform to improve teaching and learning through technology (Wang, 2021:1284). These developments show that ICTs are no longer regarded as an additional resource for the classroom, but an important component of the transformation of education. Some countries in Africa have also developed national programmes to enhance digital education. For example, Rwanda has incorporated the use of ICTs into its education strategy where it has invested in the development of teachers and increased access to digital resources for learners to spur long-term socio-economic development (International Labour Organisation, 2023:1). These international examples show that sustainable ICT integration is not only related to infrastructure but also continuous professional development, institutional support and teachers' readiness to adopt new teaching approaches.

Within the South African context, government has also recognised the strategic importance of ICT in education. The White Paper on e-Education (2004) envisages an education system in which every learner and teacher is ICT capable and able to use technology confidently to enhance teaching and learning. This policy direction has been reinforced through several national and provincial initiatives aimed at reducing historical inequalities and improving educational quality. In particular, the Gauteng Department of Education has invested much in providing schools with digital devices, electronic learning materials, internet connectivity and teacher support programmes to improve the integration of technology in the classroom (Masango, Van Ryneveld & Graham, 2020:88). Such interventions show government's commitment to modernise education and create opportunities for more innovative teaching practices in public schools.

Despite these investments, the literature demonstrates that the integration of ICT into classroom practice is inconsistent. Although many schools have received technological resources, teachers continue to face barriers such as a lack of professional development, a lack of technical support, low confidence in using digital technologies and the pressure of competing curriculum demands (Afutor, 2020:66; Atubi, 2022:3; Kandel, 2022:83; Tarman, Kilinc & Aydin, 2019:737). Much of the literature to date has focused on the availability of technological resources or the measurable outcomes associated with ICT implementation. Less attention has been paid to teachers' own experiences of integrating ICT into everyday classroom practice,

especially within Social Sciences education. From the researcher's perspective, this is an important gap because the successful integration of ICT is impacted as much by teachers' lived experiences as by the availability of technological resources.

Social Sciences occupies a distinctive position within the primary school curriculum because it encourages learners to interpret historical events, understand geographical processes, analyse evidence, and develop informed perspectives about society. These learning outcomes require teaching approaches that actively engage learners in discussion, inquiry, interpretation, and problem-solving. Therefore, ICT has the potential to enhance teaching of Social Sciences through multimedia resources, interactive maps, digital archives, simulations and collaborative learning activities. However, many of these educational opportunities are unrealised if teachers are unable or unwilling to integrate these technologies into their teaching practices. It is important to understand teachers' experiences in order to identify factors that either facilitate or hinder meaningful ICT integration within Social Sciences classrooms.

The Tshwane West District provides an appropriate context within which to explore these issues. The district includes communities such as Soshanguve, Garankuwa, Mabopane, and Winterveld and comprises a large number of public primary schools that have benefited from provincial and national ICT initiatives. Initiatives such as the Gauteng Online Project and Operation Phakisa have improved access to digital infrastructure and educational technologies in several schools (Ntsobi & Nyamkure, 2020:67938). Yet, observations recorded in the literature and confirmed by the researcher's professional interest suggest that the provision of technological resources has not always led to consistent integration in classrooms. In several cases, technology is underutilised despite heavy investment. This disconnect between policy intentions, resource provision and actual classroom practice provided the impetus for the present study.

Against this background, this study explored Social Sciences teachers' experiences of integrating ICT tools into their teaching pedagogies within the Tshwane West District of Gauteng Province. The study aims to gain a deeper understanding of the contextual, institutional, and professional factors that shape ICT integration by focusing on teachers' lived experiences. The findings are expected to strengthen policy implementation and teacher professional development initiatives and support schools

in developing more meaningful and sustainable approaches to technology-enhanced teaching and learning.

### **1.3 Problem statement**

The application of ICT in education is a critical issue for governments because it is a key factor in improving the quality of teaching and preparing learners to participate in a technology-driven society. In South Africa, national and provincial programmes have made significant investments in providing schools with technological infrastructure, digital learning materials and policies to support technology-based education and learning. However, the effective implementation of ICT is not consistently evident, at least in public primary schools. The presence of technological resources does not correspond to better pedagogical practice, indicating that factors other than technological resources, contextual and professional, continue to influence teachers' implementation and use of ICT in the classroom.

Some of the reasons identified in several studies that might hinder the integration of ICT include poor internet connectivity, poor teacher training, lack of technical support, lack of confidence in using technology, and time constraints in implementing the curriculum (Donkor, Ghanney & Dwamena, 2024:1875). These studies provide an insight into the aspects of ICT implementations, but they focus on studying the constraints of available resources or the measurable outcomes of technology implementation. Only a few studies have addressed lived experiences of teachers integrating ICT into Social Sciences teaching, especially within schools in South Africa. This means that our understanding of how teachers encounter the real-life contexts in which they implement ICT in their daily pedagogical activities is limited.

The Department of Education in the Gauteng Province has invested resources towards the expansion of access to ICT resources and digital learning initiatives to improve teaching and learning in public schools. Such initiatives have increased the availability of ICT tools in many schools, but there is evidence to suggest that the integration of ICT in classrooms remains uneven in practice. Although teachers have access to digital resources, a greater proportion of Social Sciences teachers still use traditional methods of teaching. But this raises an important question of whether technology alone can improve classroom practice. Teachers may still face challenges

regarding confidence, professional development, institutional support, and the practical use of ICT in their subject areas.

For the researcher, this disconnect between policy intention, resource provision and classroom implementation is a major educational issue. If teachers are unable to integrate ICT into their pedagogical practices, the intended benefits of technology-enhanced learning cannot be realised. More importantly, the voices and experiences of Social Sciences teachers remain relatively underrepresented within the existing body of South African research. Understanding these experiences is important because they provide valuable insight into the factors that facilitate or constrain effective ICT integration beyond what can be explained through policy documents or quantitative indicators alone.

Against this background, this study sought to explore Social Sciences teachers' experiences of integrating ICT tools into their pedagogies within the Tshwane West District of Gauteng Province. The study aimed to generate contextual knowledge by exploring teachers' lived experiences, which can contribute to strengthening teacher professional development, informing future policy implementation and supporting more effective integration of ICT in Social Sciences education.

#### **1.4 Research questions**

Creswell and Creswell (2017) argue that well-formed research questions should emanate from the identified problem and should lead to a clear path to achieve the purpose of the study.

##### **1.4.1 Primary research question**

What are the experiences of Social Sciences teachers on the integration of ICT tools in their teaching pedagogies in primary schools in the Tshwane West District of Gauteng Province?

##### **1.4.2 Secondary research questions**

- i. What institutional, professional and technical support do Social Sciences teachers receive in the use of ICT tools in their teaching?
- ii. What is the impact of the available technological resources on the integration of ICT tools in the teaching of Social Sciences in primary schools in the Tshwane West District?

- iii. What are the experiences of Social Sciences teachers on the use of ICT tools in their teaching pedagogies in primary school classrooms?

### **1.5 Aim and objectives**

The research questions outlined in the previous section provided direction for this research, and the objectives will guide the investigation of the phenomenon under study.

The aim of this study was to explore Social Sciences teachers' experiences of integrating ICT tools into their teaching pedagogies in primary schools within the Tshwane West District of Gauteng Province.

#### **1.5.1 Primary objectives**

To examine the support mechanisms, technological resources, and teachers' perspectives on integrating ICT tools in Social Science classrooms.

#### **1.5.2 Secondary objectives**

- i. To explore the institutional, professional, and technical support available to Social Sciences teachers for integrating ICT tools into their teaching pedagogies.
- ii. To determine how the availability of technological resources influences the integration of ICT tools into the teaching of Social Sciences within primary schools in the Tshwane West District.
- iii. To explore the experiences of Social Sciences teachers on the use of ICT tools in their teaching pedagogies and its influence on classroom practice.

### **1.6 Theoretical framework**

The Technology Acceptance Model (TAM) developed by Davis (1989) was viewed as the best theoretical framework for the current study because it explored teachers' experiences in integrating ICT in their teaching pedagogies. TAM has been widely used in educational research to explain the reasons for people's acceptance, rejection and continued use of technology in their work environments. A plethora of research has shown that teachers' decisions to integrate technology into their classroom practices are influenced by the availability of technological resources as well as their beliefs about the usefulness of technology and the ease with which they perceive it to be used (Al-Adwan *et al.*, 2023:15381; Ghanney & Mwinkaar, 2019:18). Therefore,

TAM provided a suitable lens for exploring and interpreting the experiences of Social Sciences teachers in the present study.

### **1.6.1 Technology Acceptance Model (TAM)**

The TAM by Davis (1989) is a widely exploited research model for determining how people might use and accept information systems and technology (Ghanney & Mwinkaar, 2019:18). Similarly, Al-Adwan *et al.* (2023:15381) state that TAM is among the most well-known models for predicting the behaviour leading to the adoption and use of technology. The TAM model has two factors that influence technology:

- Perceived usefulness (PU): The concept of perceived usefulness talks about the user's beliefs that certain technologies will enhance their work performance or other areas of life.
- Perceived ease of use (PEOU): A potential user's belief that using the target system would be easier is known as perceived ease of use (Ghanney & Mwinkaar, 2019:18)

Both external and internal factors, including the user's mindset, educational perspectives, proficiency levels, and broader organisational, technological, and societal challenges impact these variables (Ghanney & Mwinkaar, 2019:20). A recent study by Graham *et al.* (2020:2) suggests that even when resources are available, teachers may remain reluctant to incorporate ICT in teaching and learning, due to the misalignment with these perceptions. This study thus uses the TAM model to analyse data and address research questions.

### **1.6.2 Relevance to the study**

The TAM guided the exploration of Social Sciences teachers' experiences in the Tshwane West District, Gauteng, focusing on:

- i. Teachers' perception on the usefulness of ICT tools in enhancing Social Sciences education;
- ii. The perception of ease of use in utilising ICT tools in a teaching space, including their skills, available training, and support given to them;
- iii. The influence of teachers' attitudes and beliefs towards the incorporation of ICT tools into their classroom practice;

- iv. The contextual factors that are found in the schools that could facilitate or hinder the integration process, such as access to available resources, management and the school infrastructure; and
- v. How teachers' actual classroom use of ICT tools is shaped by their perceptions and the contextual factors.

The model was used to explore these teachers' experiences of integrating ICT tools into their pedagogies in Tshwane West Primary Schools, to guide this study and examine the problem at hand.

### **1.7 Definition of Key Concepts**

The purpose of defining the key concepts is to provide conceptual clarity regarding the terminology used throughout the study. These concepts are the basis of the research problem, research questions, objectives, theoretical framework, methodology and interpretation of findings. While many of these concepts are often used in educational research, they are understood in relation to this study, which investigated the experiences of Social Sciences teachers with the integration of ICT tools into their teaching pedagogies in public primary schools within the Tshwane West District. The following central terminologies are defined in relation to the research objectives and questions:

#### **1.7.1 Social Sciences Teacher**

Putri, Rofiah, Andrinigrum, and Gunawan (2019:5) define a teacher as a knowledgeable person and a role model for learners. In the context of ICT integration, Zarabanda (2019:84) categorises a range of competencies that teachers need to integrate ICT tools effectively and efficiently into their teaching pedagogies, namely:

- cognitive competence (which relates to discipline-specific knowledge), technical competence (which relates to ICT Skills),
- pedagogical competence (knowledge of how ICT tools can be used as educational tools),
- appropriate methodological skills (using proper teaching procedures in a classroom), and the ability to combine those competencies to facilitate a positive teaching and learning process.

This study focuses on Social Sciences teachers in the Tshwane West District in Gauteng Province, South Africa, and their experiences in adopting these competencies for ICT-enhanced teaching.

### **1.7.2 Information and communication technology (ICT)**

Information and communication technology (ICT) refers to the use of technological tools, such as computer hardware, software, the internet, and multimedia that permit us to access, share, and communicate information through telecommunications (Agrahari & Singh, 2013:127). ICT offers individuals multiple ways to access, utilise, and analyse knowledge (Zungu, 2022:01). The incorporation of ICT in education offers the most relevant and practical approaches for classroom use (Agrahari & Singh, 2013:127). The usage of computers, the internet, photocopiers, and printers is all part of the integration of ICT in education.

### **1.7.3 ICT tools**

Information and Communication Technology (ICT) tools are information-handling tools, such as computers, projectors, cell phones, and smartboards, used to distribute and exchange information (White Paper, 2004:15). The purpose of ICT is to store and process information automatically, and to create and share content such as videos, audio, text, objects and pictures. ICT serves as an effective model for educational teaching. It facilitates interactive learning using multimedia such as videos and presentations, and plays a key role in this study's examination of pedagogical integration.

### **1.7.4 Social Sciences**

Social Sciences is a learning area defined by the Department of Basic Education (2011:8) as consisting of History and Geography, each discipline contributing distinct concepts, knowledge and skills that assist learners in understanding people, places, societies and the environment. In addition to curriculum requirements, Social Sciences aims to develop learners who can think critically, interpret evidence, solve problems and make informed decisions about issues that affect society. Because these learning outcomes require active learner participation, the subject presents valuable opportunities for integrating ICT tools that encourage inquiry, collaboration, visual learning and critical engagement with real-world information. In this study, Social

Sciences provides the educational context within which teachers' experiences of ICT integration are explored.

### **1.7.5 Teaching Pedagogies**

Loughran (2008:1180) defines pedagogy in teacher education as "knowledge of teaching about teaching and a knowledge of learning about teaching and how the two influence one another in the pedagogic episodes that teacher educators create to offer students of teaching experiences that might inform their developing views of practice." Teaching pedagogies are the deliberate teaching approaches, instructional methods, classroom strategies, and learning activities that teachers employ to facilitate meaningful learning. Effective pedagogies are not only about delivering content, but also about the deliberate choice of pedagogical strategies that will foster learners' participation, collaboration, problem-solving and critical thinking. In terms of integrating ICT, teaching pedagogies refer to the purposeful use of digital technologies to improve learners' engagement and the quality of teaching and learning. This notion is central to the present work as it provides a rationale for the use of ICT tools by Social Sciences teachers in their daily classroom practice.

### **1.7.6 Experiences**

Experience is a person's interpretation, perception, feelings, and understanding derived from direct interaction with specific situations or phenomena (Acampado, 2019:2). In qualitative phenomenological research, lived experiences are the primary source of knowledge, as they help researchers understand how participants make sense of the realities they encounter in their everyday lives. In this study, experiences refer to the practical realities that Social Sciences teachers go through in their attempts to integrate ICT tools into their teaching pedagogies. These experiences include enabling and constraining factors that influence teachers' decisions, confidence, attitudes, and classroom practices. Understanding these lived experiences was key to achieving the purpose of the study and was the basis on which the findings and conclusion were established.

### **1.8 Preliminary literature review**

A literature review assists researchers to establish what is already known about a particular phenomenon, identify areas of agreement and disagreement among scholars, and locate gaps that justify further investigation (Snyder, 2019:334). Based

on this study, the preliminary literature review assisted the researcher to understand how previous studies have examined ICT integration, teachers' experiences and technology-supported teaching within primary education. The preliminary review provided an opportunity to identify areas that remain underexplored, particularly the lived experiences of Social Sciences teachers integrating ICT tools into their teaching pedagogies within the Tshwane West District.

### **1.8.1 Characterisation of ICT**

Information and Communication Technology (ICT) is classified as the management, storage, and transmission of information using a varied set of recognised technological resources and toolkits (Bawa, Mikailu & Sidi, 2022:12). ICT is a foundation that supports the modern world. This system addresses cost-related problems, teacher shortages, and educational limitations caused by time, distance, and poor educational conditions (Das, 2019:98).

### **1.8.2 Social Sciences curriculum**

Social Sciences education in South Africa aims to expose learners to knowledge beyond their immediate experience, enabling them to develop critical thinking skills about their environment. The Department of Education (2011:8) states that History and Geography receive individual teaching because they deliver distinct concepts, knowledge and skills for the subject content to generate interest in the world.

### **1.8.3 Teaching of Social Sciences using ICT**

The study carried out by Sari and Hasanah (2019:44) found that, in the absence of technology, Social Sciences lessons become boring because teachers rely solely on traditional teaching models, such as lecturing, which fail to stimulate learners' interest in learning. Okobia (2023:444) notes that in the modern age, the proper application of ICTs and ICT resources is necessary for teaching Social Sciences. Salui & Odjugo (2020:176) describe the effective teaching of Social Sciences as teaching that fosters effective twenty-first-century learning and the attainment of Social Sciences goals. Furthermore, Atubi (2022:3) highlights the power of ICT in teaching Social Sciences, improving learning by combining teaching approaches, making it more practical, and lessening confusion.

Mensah and Osman (2022:123) highlight the advantages of utilising ICT in teaching Social Sciences, including improved teaching methods and practicality. They also

believe that utilising ICT helps learners understand what they have been taught, makes lessons more practical, and improves learners' attention in class. Karunakaran and Dhanawardana (2023:25) maintain that ICT tools such as PowerPoint, computers, virtual learning, and the internet can improve the teaching and learning of Social Sciences concepts, thereby ensuring holistic knowledge acquisition.

#### **1.8.4 Technological resources used to enhance the teaching and learning of Social Sciences in primary schools**

To improve the quality of teaching Social Sciences, a wide variety of technological resources can be deployed. Arkorful *et al.* (2020:2) state that the accessibility of technological resources is vital, as it helps Social Sciences teachers and learners access information and use these resources with confidence in their respective classrooms. Sharma and Nambiar (2019:144) maintain that when smartboards and computers are used together they can ensure that lessons are delivered successfully. Filita and Jita (2021:221) highlight numerous ICT teaching and learning tools, including desktop computers, laptops, interactive whiteboards, the internet, word processors, digital projectors, tape recorders, photocopiers, and WhatsApp.

There are a number of ICT tools that are easily accessible for teachers to incorporate in teaching Social Sciences. Examples include interactive whiteboards (smartboards) that allow teachers to display historical maps, geographical images, videos and interactive learning activities. Google Classroom is a platform where learning materials can be shared, activities assigned and communication between teachers and learners encouraged beyond the classroom. However, Kalogiannakis and Papadakis (2019:114) state that studies show that teachers' knowledge, experiences, abilities, and attitudes regarding the effectiveness of ICT tools in learning influence their intention to incorporate ICT into the curriculum. Alibrahim and Alsodoon (2020:2) advocate that teachers have a positive perspective toward adopting ICT; however, they must learn how to operate it. According to Garcia, Kelly, and Stamatis (2022:55), teachers' beliefs are what deter them from effectively incorporating technology into their lessons; however, with the right training, they can do so.

Social Sciences teachers encounter difficulties when implementing technological methods due to insufficient background knowledge, limited experience, and personal barriers (Belda-Medina & Calvo-Ferrer, 2022:3). Murwaningsih (2025:2) suggests that some of the important traits that may be enhanced through professional development activities include professional competency in ICT education, collaboration for ICT inclusion, and skills and practices in ICT education. According to Graham *et al.* (2020:750), technology has not been sufficiently used in the classroom, even by technologically savvy teachers.

### **1.8.5 Impact of ICT in education**

Information and Communication Technology (ICT) is the most powerful tool for transforming education in several ways. ICT in education ensures that each learner's unique needs are met by creating a learning environment in which the learner is prioritised over the teacher (Bansal, 2023:4). According to Fujita (2023:2), ICT in teaching enhances teacher involvement in the teaching-learning process. Laxmi (2026:3) argues that effective ICT integration is promoted by access to digital resources, strong school leadership, continuous teacher development, and learner-centred activities that prioritise meaningful integration. Channa *et al.* (2023:145) identified three main reasons for using ICT in education: to address challenges in learning, to act as a catalyst for change, and to support economic development. ICT implementation enhances classroom lesson quality, boosts teacher efficiency, and promotes inquiry-based learning. The economic shift is mainly driven by ICT. When used correctly, ICT can significantly transform teaching and learning processes, making its role in education a highly debated and vital topic today (Channa *et al.*, 2023:145). Henderson (2020:51) emphasised that ICT in education adds value by improving the effectiveness of learning.

Although these benefits are well acknowledged in the literature, the researcher's observations within the educational setting suggest that the availability of ICT resources does not necessarily translate to meaningful classroom integration. Many primary schools have digital technologies such as interactive whiteboards, tablets, computers, projectors and online learning platforms at their teachers' disposal. The researcher further observed that variations in teachers' confidence, technological competence, institutional support, and access to ongoing professional development often influence the extent to which ICT is incorporated into everyday teaching

practices. Thus, the challenge is no longer confined to supplying technological resources but to ensure that teachers receive adequate support to integrate these resources in ways that enhance learner engagement and educational outcomes. These contextual observations provided additional impetus for conducting the present study in the Tshwane West District where similar realities continue to impact the integration of ICT into Social Sciences classrooms.

#### **1.8.6 Impact of ICT on the teaching of social sciences**

Smart classrooms with transformation-driven environments are spaces where ICT is integrated into teaching and learning. Das (2019:98) notes that ICT has the potential to revolutionise the way education is delivered. Moreover, ICT offers more opportunities for communication and collaboration between teachers and learners (Das, 2019:98). Learners' achievements can be enhanced when ICTs are utilised effectively to support teachers' current pedagogical philosophies. (Bawa *et al.*, 2022:12). Social Sciences education through technological implementation yields improved learning outcomes that combine efficiency, accuracy, and speed. ICT can provide learners from underserved areas with access to resources and prepares them for future careers (Anastasopoulou *et al.*, 2024:49).

The over-dependence on technology may also limit the meaningful interaction between teachers and learners. Technical problems such as bad internet, software glitches and power outages may disrupt the lesson and affect the teaching negatively. Soma, Nantomah, and Adusi (2021:6) state that, because learners copy web content rather than create their own unique work, the use of computers in the classroom has resulted in a loss of critical thinking, grammar, and problem-solving abilities. Therefore, Social Sciences teachers must consider the sorts of software or hardware used in the classroom.

#### **1.8.7 Teachers' experiences and perspectives in using ICT in Social Sciences classrooms**

Every teacher has a different experience with ICT in his or her teaching practice. Rana, Greenwood, and Henderson (2022:276) state that teachers are not trained in the use of ICT in their universities before beginning their teaching careers. The government has additionally granted non-governmental organisations permission to provide ICT

infrastructure and training for teachers and learners in rural schools. Their experience and attitude toward ICT may be different and negative.

Abel, Tondeur, and Sang (2022:3) maintain that a teacher's behaviour in a classroom is determined by perception. In addition, perception affects whether teachers are aware and ready to accept a new curriculum, adopt teaching strategies, and carry out new activities. Erdogan and Serefli (2021:233) state that Social Sciences teachers perceive a lack of internet and electricity infrastructure while utilising smartboards as a challenge to ICT integration. Furthermore, Ismail, Jomezai, and Baloch (2020:1538) rightly argue that behind any technology is a human who can use it to handle data, process information, share knowledge, address issues, and innovate. However, different factors influence how Social Sciences teachers experience ICT in their respective classrooms. Integration of ICT faces hindrances at both the personal and school levels, with school-level factors such as support, training, and resources, and individual-level factors such as resistance to transformation and consistency (Ismail *et al.*, 2020:1538). Akoja, Utulu, and Nomor (2020:155) state that factors such as teachers' poor ICT skills, their gender, and a lack of ICT facilities hinder Social Sciences teachers from integrating ICT into their classrooms.

Donkor *et al.* (2024:1875) state that the majority of Social Sciences teachers lacked adequate or current knowledge and skills to incorporate ICT into their practice. Most schools do not offer ICT refresher courses to help teachers incorporate ICT into their teaching methodologies. Teachers in the Social Sciences often put off integrating ICT due to issues such as a shortage of computer equipment, software, and technical assistance, as well as training, anxiety, and apprehension about losing control of the classroom.

#### **1.8.8 The 21<sup>st</sup> Century competencies in teaching Social Sciences using ICT**

Teachers today are faced with the task of preparing learners for the 21st-century global market, which can only be realised through delivering quality education. Sulaiman and Ismail (2020:3536) maintain that, to prepare learners for modern-day economic challenges, teachers must focus not only on improving learners' academic performance but also on developing a workforce grounded in twenty-first-century skills and comprehensive personality development. Astuti, Aziz, Sumarti and Bharati (2019:2) maintain that, in the 21st century, education is tailored to prepare learners for

a dynamic world, encourage creativity, enhance individual intellect, and foster innovation. The modern-day cornerstone of civilisation depends on teachers, according to Astuti *et al.* (2019:2). Social Sciences learners depend heavily on teachers to reach their academic goals, which makes 21st-century education depend on ICT knowledge.

### **1.8.9 Challenges related to ICT adoption**

Teachers are always confronted with many challenges when integrating ICT into the curriculum (Hashemi & Kew, 2021:78). In addition, lack of technical support and training, teachers' attitudes, lack of infrastructure, lack of time, and technological literacy and proficiency can be counted among the challenges that teachers face when integrating ICT.

#### **1.8.9.1 Lack of technical support and training**

Despite having access to ICT resources such as supercomputers, most teachers lack the technical knowledge to utilise them effectively in classroom settings because they have not received sufficient training in computer skills (Soma *et al.*, 2021:6). Moreover, Soma *et al.* (2021:7) state that the availability of computers in the classroom and teachers' proficiency with the technology are two key factors that determine how well computers are integrated into teaching and learning. Inadequate technical support and professionals to resolve technical issues have hindered the integration of ICT in the classroom (Razak, Jalil, & Ismail, 2019:185). Lack of practice and training is also among the issues that affect ICT integration in classrooms and may be detrimental to learning and learners' academic performance (Olita and Orong, 2023:68).

#### **1.8.9.2 ICT Infrastructure in schools**

The ICT infrastructure remains a serious challenge across most South African Schools. According to Nduwayezu and Nzabwirwa (2022:60), for efficient incorporation of ICT into schooling, ICT-related infrastructure is indispensable. The deficiency of infrastructure, such as computers, software, hardware, scanners, printers, projectors, internet connectivity, and electricity, continues despite attempts in African countries. Buabeng-Andoh (2019:273) found that when teachers have access to technological resources within reach, integration becomes possible; conversely, the provision of these resources does not automatically translate into teachers integrating ICT into the curriculum.

#### **1.8.9.3 Lack of time in teaching**

Olita and Orong (2023:68) state that limited classroom time impedes teachers from integrating ICT into the curriculum, leading to demoralisation about ICT integration and time-management problems. Hashemi and Kew (2021:78) indicate that before entering the classroom, teachers should take additional time to test and prepare the electronic equipment to ensure everything is operating correctly. In this instance, Social Sciences teachers can fail to integrating ICT into their teaching pedagogies due to inadequate time. Tarman, Kilinc, and Aydin (2019:739) found in their study that time constraints and insufficient time for ICT integration in the Social Sciences curriculum remain barriers. Teachers face time constraints and need to allocate enough time for the adoption and usage of in Social Sciences classrooms. The Department of Basic Education (2011:15) states that Social Sciences is allocated three hours per week over a ten-week term, totalling 30 hours of teaching time. This is in line with the Curriculum and Assessment Policy Statement (CAPS) for Social Sciences. This indicates that each ten-week term for history and geography contains 15 hours.

#### **1.8.9.4 Teachers' attitudes towards technology**

Zamir and Thomas (2019:309) note that attitudes draw on internal beliefs to influence behaviour and demonstrate qualities such as honesty, generosity, and devotion. Olita and Orong (2023:68) affirm that some teachers, sceptical of technology, believe it may exacerbate learners' behavioural issues and slow their cognitive and developmental growth. Thus, teachers end up developing a negative attitude towards the use of technology in their classrooms. According to Hashemi and Kew (2021:78), teachers' lack of confidence and "fear of failure" hinders them from utilising technology. Additionally, teachers' beliefs, knowledge, and attitudes affect how effectively they use technology in their classrooms. The positive attitude of teachers plays a crucial part in ensuring that they effectively integrate their technical knowledge into their learning and teaching (Tarman, 2019:738). The use of ICT in the classroom is greatly influenced by teachers' attitudes toward technology. Additionally, teachers' views and attitudes toward ICT integration directly influence learners' attitudes toward ICT.

#### **1.8.9.5 Professional development, support, and training**

Salmerón Aroca *et al.* (2023:2) mention that teachers' professional growth is an ongoing process focused on enhancing their knowledge and skills. The development of effective teaching methods through ICT tools requires consistent support for the

professional education of teachers (Molotsi, 2022:3). The acquisition of such abilities creates student interest in alternative approaches to learning content. Szyszka, Tomczyk and Kochanowicz (2022:4) posit that regular support from school management can strengthen the frequency of ICT use in the classroom, especially when school leaders provide continuous support that encourages the use of technology and promote a collaborative teaching and learning environment for sharing knowledge. Furthermore, when school leaders provide clear direction, along with funding for training and support, the school receives a proper return on its investment. Schools implement technical support functions to train their personnel about ICT implementation (Buabeng-Andoh, 2019:274).

#### **1.8.9.6 Technological literacy and proficiency in teaching**

Santoso and Lestari (2019:245) describe technological literacy as the ability to use, comprehend, manage, and access technological innovations that combine procedures and information to solve problems and improve individual skills. Santoso and Lestari (2019:245) mention that basic literacy involves understanding the operation of ICT tools and knowing how to use them. This includes knowledge of ICT concepts such as supercomputers, information systems, digital data, algorithmic thinking, programming, technical issues, and social impacts (Santoso & Lestari, 2019:245).

Panoy, Ching, and Andrade (2022:617) assert that technological proficiency is the ability to utilise a wide variety of technical tools and procedures to carry out essential activities and produce meaningful outcomes. This involves managing emails, using computers and other technology, and using productivity tools like Microsoft Office. Additionally, it involves fixing computer hardware and software. Moreover, teachers who lack experience with technology have low technological proficiency, as they are unable to use technological tools effectively.

#### **1.8.9.7 International studies of ICT in Social Sciences teaching and learning**

Tarman *et al.* (2019:738) state that International and National studies show that integrating ICT into education can enhance higher-order thinking and the quality of education, lessening the digital divide. Despite significant efforts to assist teachers in integrating ICT into their classroom practice, a recent study indicates that Social Sciences teachers face serious challenges in integrating ICT (Pozas and Letzel, 2021:825). Gómez-Fernández and Mediavilla (2022:4) highlight the importance of

teachers' ICT usage in Norway and Spain, noting that ageing is adversely associated with ICT usage, and that the primary factors influencing teachers' ICT usage in Korean elementary schools are aptitudes, dispositions, and attitudes. Nations like Bangladesh prioritise ICT expansion, improving planning policies and funding allocation (Obaydullah & Rahim, 2019:643). Graham, Stols, and Kapp (2022:751) maintain that despite governments' efforts to provide infrastructure, equipment, and teacher development, technology adoption and integration have remained insufficient in many countries. In their studies, Graham *et al.* (2022:751) found no difference in South Africa, where only a few teachers successfully integrate technology into their classrooms.

## **1.9 Research methodology**

This section provides an overview of the methodology used to explore Social Sciences teachers' experiences of integrating ICT tools into their pedagogical practice in the Tshwane West District. Kumatongo and Muzata (2021:17) state that the term "research methodology" is typically used to refer to several characteristics of a study, including its design, data collection and analysis techniques, subject selection, and the specific treatment of information.

### **1.9.1 Research design**

This study employed a qualitative research design to gain insights into the need for ICT implementation in primary schools within the Tshwane West District. Kumatongo and Muzata (2021:17) state that research design helps the researcher generate empirical data for the study by providing a scheme, blueprint, or plan for answering the initial research problem. Furthermore, a framework comprises strategies and methods utilised by the researcher to provide an amicable solution to a problem. This research is considered inductive research. Observation is the very first step in inductive research (Chakma & Li, 2025:234). The main goal of inductive research is to allow findings to emerge from common, prevailing, or central themes in the raw data without being constrained by a predefined method (Chakma & Li, 2025:234).

### **1.9.2 Research paradigm**

Yong, Husin and Kamarudin (2021:5858) state that a paradigm is a theoretical framework utilised to assemble observations and reasoning. It is widely accepted by researchers and offers an array of hypotheses, an ontology, an epistemology, and

guidelines for doing scientific inquiry. The paradigm lays the groundwork for all philosophically oriented scientific studies by accommodating people's conceptions of truth and knowledge (De Vos, Strydom, Fouche & Delport, 2011:513). This study follows the interpretive search paradigm, in which knowledge is derived from participants' subjective understanding of their surroundings and their experiences integrating ICT tools into their pedagogy, viewing reality as a product of social construction (du Plooy-Cilliers, Davis & Bezuidenhout, 2019:29). Therefore, this research followed the interpretivist paradigm, as it concerns Social Sciences teachers' experiences of integrating ICT tools into their pedagogies in the Tshwane West District, Gauteng Province, South Africa.

From the researcher's perspective, it was important to understand teachers' lived experiences in their everyday teaching environments. The successful integration of ICT is influenced not only by the availability of technological resources but also by teachers' beliefs, professional experiences, institutional support and the realities they face in practice. The interpretivist paradigm provided a suitable basis for exploring these contextual realities and was consistent with the qualitative phenomenological design adopted in this study.

### **1.9.3 Research approach**

This study followed a qualitative research approach because it is well-suited to exploring the experiences of Social Sciences teachers integrating ICT tools into their teaching practices in Tshwane West District, Gauteng Province, South Africa. The study employed a qualitative research approach to explore the "Why" and acquire a deeper comprehension of the challenge at hand. McMillan and Schumacher (2014:245) argue that the qualitative research approach is wide and it integrates various methods that seek to understand and explain meaning within the given context. Qualitative research is a form of research that focuses on words, unlike quantitative research, which is number-oriented (Nieuwenhuis, 2016:34). Adedoyin (2020:1) stresses that qualitative research includes every aspect of human experience, including distinctive personal traits and significant aspects of a given event. Similarly, Babbie and Mouton (2017:76) uphold that the primary focus of qualitative research is to study humans from the standpoint of the social actors themselves. Based on the aforementioned definition, the qualitative research approach was the most suitable for this study.

#### **1.9.4 Research design**

Kumatongo and Muzata (2021:18) describe phenomenology as the study of phenomena, which include events, situations, human experiences, and ideas. It seeks to portray lived human experiences, emphasising the subjectivity of reality and individual perspectives. This study chose a phenomenological approach because it offers flexible data collection methods.

In the context of this study, the intention was not to measure the effectiveness of ICT or to test predetermined relationships. Rather, it was to gain a deeper understanding of how teachers perceive, experience, and interpret the integration of ICT in their classroom practice. From the researcher's point of view, a phenomenological design provided a suitable opportunity to embrace the realities, challenges and enabling factors that inform teachers' experiences of ICT integration in their natural school settings. This created contextual insights that go beyond what quantitative methods can explain on their own. The research design therefore closely aligned with the interpretivist paradigm, the research questions and the overall aim of the study.

#### **1.9.5 Research settings**

The study was conducted in three public primary schools located within the Tshwane West District of the Gauteng Province. The context was selected because it offered an appropriate setting to investigate the experiences of Social Sciences teachers with the integration of ICT tools in their teaching pedagogies. The schools were selected because they had been involved in provincial and national initiatives to promote the integration of ICT, thus providing suitable environments to explore opportunities and challenges of technology-enhanced teaching.

From the researcher's perspective, the Tshwane West District was a relevant educational context. This was because, despite continuous investment in digital resources and policy implementation, there were still notable variations in the way ICT was integrated into classroom practice across schools. These contextual differences provided an opportunity to explore the lived experience of teachers in authentic teaching contexts and to gain a greater understanding of the institutional and practical factors that influence ICT integration.

#### **1.9.5.1 Population of the study**

du Plooy-Cilliers et al. (2019:29) define the population as the total number of masses or entities from which the information is drawn. The study was conducted with teachers of Social Sciences in 3 public primary schools in the Tshwane West District of Gauteng Province, which has 74 primary schools. This population was considered appropriate because these teachers were directly involved in the teaching of Social Sciences. These teachers had practical experience of integrating, or attempting to integrate, ICT tools into their teaching pedagogies.

From the researcher's perspective, the choice of the participants who had direct exposure to the phenomenon under investigation was important. Meaningful insights could only be obtained from participants who had first-hand experience. The opportunities, challenges, and realities associated with ICT integration within these teachers' everyday teaching environments. The selected population provided an appropriate source of information for addressing the research questions and the overall aim of the study.

#### **1.9.5.2 Sample**

A sample is the group from which the researcher collects research data. De Vos *et al.* (2011:418-425) maintain that a sample is always a small group taken from a population. Using a purposive sampling method, the researcher applied professional judgement to deliberately select the most appropriate participants based on key characteristics shared by those under study (Flick, 2018:39). This study employed purposive sampling to select the schools and participants for this research project. Neuman (2018:112) refers to purposive sampling as a non-probability sampling method in which units to be observed are intentionally selected based on a set of attributes. The researcher thus selected only schools with ICT resources. When conducting research, it is very critical to select research locations that are suitable and feasible (Maree, 2007).

The proximity of the schools determined the sample size that the researcher chose. The sample consisted of 3 primary schools, 15 teachers in total (4 per school = 12), and 3 departmental heads (1 per school = 3), all selected from each school. These teachers were chosen because they were seen as a group with experience integrating

ICT; therefore, they were knowledgeable and the most suitable to answer the research questions.

From an academic perspective, purposive sampling ensured that the voices heard during the research process were representative of real classroom experiences. This approach gave sufficient contextual information to understand the realities impacting the integration of ICT in Social Sciences education. The details of the participant selection process, inclusion criteria, the distribution of the participants across the participating schools, the sample size and the rationale for the sample selected are discussed in Chapter 3.

#### **1.9.6.3 Data collection**

Qualitative data encompasses information presented in the form of words or sentences, which includes both nominal and descriptive types of non-numerical data. Qualitative data cannot be quantified, hence is not expressed in numbers, yet it captures the richness of the human experience and sheds light on complex phenomena that may be overlooked when relying on numerical data alone (Surucu & Maslakci, 2020:2695). Data on emotions, feelings and perceptions were gathered through unstructured methods such as interviews, notes and a tape recorder (Taherdoost, 2021:12) to answer the “how” and “why” questions.

This study used semi-structured interviews to capture participants’ multiple realities regarding the integration of ICT tools into their pedagogies. A semi-structured interview is a process in which the researcher gathers data using a predetermined set of questions. Moreover, it allows the researcher to follow up with additional questions if a thought-provoking or new one arises during the interview (Creswell, 2018:220). Denscombe (2013:168) describes semi-structured interviews as those that allow participants freedom in how they answer the questions, without a predetermined set of options. The primary purpose of these questions was to enable the participants (Social Sciences teachers and departmental heads) to reflect on and account for the state of ICT integration in their subject.

Considering the qualitative phenomenological nature of the study, this approach enabled participants to describe their experiences, perceptions, and challenges in their own words. This approach assisted in generating rich contextual data relevant to the research questions. The semi-structured interviews allowed the researcher to

understand the realities of ICT integration from the participants' perspective in more depth than through structured questioning alone. They allowed participants to reflect on the institutional, professional and practical factors that influenced their classroom experiences. The procedures that were followed during data collection, including the development of the interview guide, interview administration, recording of interviews and data management processes, are discussed in Chapter 3.

#### **1.9.6.4 Data analysis**

According to Adedoyin (2020:1), qualitative data analysis is the process of arranging and organising data to understand our complex social and subjective environment using various techniques. In this study, the researcher employed inductive data analysis, which enabled him to develop a theory and identify themes by analysing recordings and printed verbal material (Günbayi & Sorm, 2018:57). Furthermore, this study employed thematic analysis. The data was transcribed, read numerous times, and notes were taken to identify meaning in the valuable study material. A framework was made, and data was classified. This is commonly known as data coding. The researcher began by identifying themes and patterns, including thoughts, concepts, actions, interactions, words, and other elements. The themes were determined, the relative significance of the responses received was assessed, connections were made across topics or data sets, and inferences were drawn from the data. The researcher then ascribed meaning and significance to the information and theoretical framework to relate the results and highlight similarities and differences with the existing literature.

Within the context of this study, the use of thematic analysis made it possible to explore the common experiences, perceptions, challenges, and enabling factors influencing Social Sciences teachers' integration of ICT tools into their teaching pedagogies. Thematic analysis, from the researcher's perspective, provided a structured but flexible means of interpreting participants' narratives. This was to maintain the richness of their experiences and to ensure that findings represented the realities of ICT integration within their everyday teaching environments. The identified themes became the basis for presenting and interpreting the findings against the study's objectives, the Technology Acceptance Model (TAM), and the existing body of literature. A detailed description of the data analysis procedures is provided in Chapter 3.

## **1.10 Trustworthiness**

According to Stahl and King (2020:26), qualitative research simply does not adhere to the quantitative idea of validity. However, qualitative researchers strive for the less obvious goal of credibility, which means that when readers understand the written material, they trust the study's results (Surucu & Maslakci, 2020:2695). The four components of trustworthiness in qualitative research are credibility, dependability, transferability, and confirmability, although readers should not expect precise results.

### **1.10.1 Credibility**

According to Zohrabi (2013:255), credibility is informed by how well the researcher analysed the participant data. In this study, credibility was enhanced by collecting data directly from Social Sciences teachers who had first-hand experience of integrating ICT tools into their teaching pedagogies. Semi-structured interviews allowed participants to discuss their experiences while probing questions allowed the researcher to seek clarification where necessary. The researcher felt that the credibility of the data was enhanced by working with participants who had first-hand experience of the phenomenon. This implied that the findings were a true picture of the realities of ICT integration in the schools that participated.

### **1.10.2 Dependability**

Dependability is known as the depth to which the researcher can compare the results of the study to similar results in context (Surucu & Maslakci, 2020:2695). An auditing approach with anti-bias qualities is embraced in a well-constructed research study so that other researchers may use it without difficulty. However, if most participants give similar responses to the question, that will suggest that the study has reached the dependability stage.

That said, dependability was promoted by following a systematic research process. This was done by using the same interview procedures for all participants, and by keeping clear records of the methodological decisions made throughout the investigation. From a researcher's perspective, recording each stage of the research process increased the transparency of the study. This meant that the procedures undertaken were logical, consistent and in accordance with the purpose of the investigation.

### **1.10.3 Transferability**

Zohrabi (2013:255) views transferability as obtaining the same results through using the same findings in a similar situation. Transferability is achieved when the findings from the study can be utilised in other institutions in the future.

Although this study focused on public primary schools within the Tshwane West District, sufficient contextual information regarding the research setting, participants, and methodological procedures was provided. This enabled readers to determine the relevance of the findings to comparable contexts. From the researcher's perspective, providing rich contextual descriptions was important. This was because it meant that other researchers could determine whether the findings were relevant to their own educational environments.

### **1.10.4 Confirmability**

Confirmability refers to the extent to which the gathered data support the study's findings and interpretations (Adedoyin, 2020:1). Confirmability is achieved when the study's findings can be used by researchers across generations without introducing bias or confusion. The results of the study exhibit relevance, accuracy, and trustworthiness. In simple terms, confirmability means that the results of the study must be understandable to others and positioned for interpretation without misinterpretation (Kakar *et al.*, 2023:151).

Confirmability in this study was enhanced through linking the interpretation of the data to the responses of the participants and supported by the existing body of literature and the TAM. Objectivity was important for the researcher throughout the research process to ensure that the findings were reflective of the participants' lived experiences and not the researcher's personal opinions or preconceived expectations.

### **1.11 Ethical considerations**

In qualitative research, the researcher must consider ethical concerns. Ethical considerations were addressed because professional educators and formal institutions, such as schools, would be part of the research. Moreover, an application was submitted to the University of South Africa (UNISA) College of Education Ethics Committee to conduct the research. Permission was also obtained from Gauteng Department of Education (GDE), school principals and School Governing Bodies (SGBs) to gain access to the schools to interview the teachers. The researcher was

able to collect data only after the permission was granted. Therefore, participants must know whether they will be exposed to any risk. All participants were given consent forms before the start of the interview sessions. Ethical principles and professional standards are two essential ingredients for ensuring that the researcher, with integrity, carries out research in a responsible manner (Surucu & Maslakci, 2020:2699).

Before the start of data collection, the participants were informed that their identities and information would not be disclosed in any media during or after the investigation, nor would their personal information be disclosed. A detailed description was given to the participants to inform them of what would happen during the study. The researcher later returned to the participants to verify the finalised work and ensure the accuracy of the information, so participants could be confident that the correct information was captured. All participants were informed that their participation was voluntary and that they could withdraw if they no longer wished to be part of the study.

The researcher adhered to high standards of ethics not only to satisfy institutional research requirements but also to build trust with the participants. This was important by creating an environment where they could share their experiences openly, honestly and without fear of prejudice or professional disadvantage. Ethical considerations formed an integral part of the research process and contributed to the credibility and integrity of the study. A discussion of the ethical procedures followed, together with the relevant supporting documentation, is presented in Chapter 3 and the accompanying appendices.

### **1.12 Limitations of the Study**

Murray and Beglare (2012:81) define limitations as anything that threatens the validity of the study. While the study was conducted with great rigour, some limitations need to be acknowledged. The study was restricted to 3 public primary schools in the Tshwane West District of the Gauteng Province and only Social Sciences teachers were involved. Therefore, the findings may not necessarily be transferable to other districts, provinces, school phases or subject specialisations with different contextual realities. The qualitative phenomenological design aimed to obtain rich and detailed accounts from a relatively small number of participants, rather than to produce statistically generalisable findings.

From the researcher's point of view, these limitations were accepted as the main intention of the study. The important thing was to acquire an in-depth understanding of the lived experiences of teachers regarding the integration of ICT tools into their teaching pedagogies. Despite these contextual limitations, the study yielded rich insights that contributed to understanding the integration of ICT in Social Sciences education. This formed a basis for future research in similar educational contexts. A more exhaustive discussion of the limitations of the study is provided in Chapter 3.

### **1.13 Chapter outline**

Chapter 1 introduced the study. It presents the background to the study, providing brief information on the impact of incorporating ICTs into the education system on the quality of teaching and learning. The problem statement and sub-research questions were based on the need to carry out this study. The aim and objectives of the study were formulated, and the research methodology used to answer the research questions and achieve the aim was discussed. The chapter also included a preliminary literature review and clarification of key terms. The chapter concluded with the possible limitations of the study as experienced.

Chapter 2 presents a synthesis and analysis of the literature related to the study and describes the study's framework.

Chapter 3 focuses on the research methodology for the study; it discusses the population, the sample and sampling procedure, the data collection procedure and data analysis.

Chapter 4 presents the findings of the study to answer the research questions.

Chapter 5 maintains the study's purpose by presenting a summary, conclusion, recommendations, and suggestions for further studies.

### **1.14 Summary of the chapter**

The chapter examined Social Sciences teachers' experiences of integrating ICT tools into their pedagogies in the Tshwane West District in Gauteng, South Africa. The purpose of this chapter was to provide a brief overview of the study's background, explaining how and why ICT affects our daily lives and why incorporating it into teaching and learning is essential to raising and enhancing educational standards.

The following chapter reviews the literature. The chapter discusses what other scholars have established in similar studies on Social Sciences teachers' experiences integrating ICT tools into their pedagogies.

## **CHAPTER 2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

### **2.1 Introduction**

The study was introduced in Chapter 1 by discussing the background to the problem, the research questions, the objectives and the methodology that guided the investigation. This chapter reviews and analyses the experiences of Social Sciences teachers integrating Information and Communication Technology (ICT) into their pedagogies within the Tshwane West District of Gauteng Province. The literature reviewed in this chapter provides the conceptual and scholarly basis upon which the study is grounded and assists in explaining the current state of knowledge relating to ICT integration in Social Sciences education.

A literature review is more than a summary of previous studies. It allows the researcher to consider existing evidence, compare multiple scholarly views, highlight consistencies and contradictions in the literature and to establish where gaps in knowledge still exist. Within the framework of this study, the literature review serves to explain the factors that influence ICT integration in Social Sciences classrooms. It serves as a basis for understanding the empirical findings presented later in the dissertation. It also illustrates how the present investigation contributes to the growing body of knowledge on technology integration in South African basic education.

This chapter is driven by the secondary research questions of the study, which are to understand the support that is available to Social Sciences teachers to incorporate ICT into their pedagogies. The focus is on the technological resources that are available within primary schools in the Tshwane West District and teachers' perceptions towards the use of ICT during classroom instruction. The discussion of these questions in the existing literature provides an informed basis for understanding the realities experienced by teachers before the presentation of the findings from the fieldwork.

The discussion begins by examining the significance of the literature review in educational research before exploring the concept and classification of ICT. The following section analyses the policy framework of the Department of Basic Education for the integration of ICT and its connection with the Social Sciences curriculum. It subsequently delves into the educational advantages of ICT, various approaches to

using ICT in teaching and the prerequisites for effective technology integration, which include teachers' digital skills, attitudes and leadership support. Challenges impacting the implementation of ICT in schools are critically discussed before the chapter concludes with the Technology Acceptance Model (TAM) serving as the theoretical lens through which the findings of this study are interpreted. These discussions lay the theoretical and contextual foundation for comprehending the experiences of Social Sciences teachers in integrating ICT into their pedagogical practices.

## **2.2 Literature review according to the research problem**

The preceding chapter provided an overview of what the researcher intended to explore regarding Social Sciences teachers' experiences in integrating ICT tools in their teaching pedagogies in Tshwane West District in Gauteng, South Africa. As stated by Chigbu *et al.* (2023:2), the literature review in this chapter assisted the study in establishing what other researchers have discovered regarding the problem of interest and in identifying the available body of knowledge.

### **2.2.1 The significance of literature in research**

Bey-Boumezrag (2022:403) describes a literature review as an orderly process for gathering information and synthesising prior data. It involves the analysis, appraisal, and description of previous research on a particular discipline or problem. According to Cram, Templier and Paré (2020:1103), the literature review is the basis of research work, providing researchers with insight into a particular problem by describing, analysing, and explaining a phenomenon, or by continually testing a theory against prior literature. The literature review assists in putting the research at hand into perspective, establishing the main models and theories relevant to the study, and identifying gaps related to the topic (du Plooy-Cilliers *et al.*, 2019:101). Ormanci (2023:751) states that in research, a literature review is used for various purposes, like creating a theoretical framework, establishing novice approaches, recognising the current studies, helping in validating the current findings of the study and, most importantly, the literature review helps the researcher to find the gaps and the inconsistencies in the field.

### **2.2.2 Classification of ICT**

Chaidi, Drigas, and Karagiannidis (2021:2) describe Information and communication technology (ICT) as the process of transferring diverse data forms, such as images,

sound, video, and symbols, to communicate messages. Deventer (2016:35) states that information technology (IT), which includes desktop computers, laptops, and cell phones, is often referred to as ICT. Shokeen and Ruwali (2022:548) view these technologies as tools that facilitate access to information through communication. While similar to IT, they mainly emphasise communication technology (Ekwue, Mayah & Obasi, 2025:202). This includes the internet, computers, and software, all of which are generally user-friendly. Additionally, they are vital in enhancing teachers' preparation and improving pedagogical quality (Shokeen and Ruwali, 2022:548).

Garima and Gupta (2022:106) note that ICTs in schools are employed to attain educational goals, improve access to resources, build capacities, and manage educational systems. ICT makes it easy to utilise cutting-edge teaching strategies and educational resources, which encourages teamwork on group projects among learners and the simultaneous learning of technological skills and knowledge (Nдалу, Nдалу, & Wordu, 2022:11). For this study, ICT refers to the use of computers, laptops, tablets, interactive smart boards, overhead projectors, and other technologies in the classroom for pedagogical purposes.

### **2.2.3 Department of Basic Education (DBE) policy on ICT integration in Social Sciences teaching**

Nxusa, Moreeng and Chimbunde (2025:127) maintain that the DBE has encouraged the incorporation of ICT in the teaching of Social Sciences. Qazi, Bhat, and Shah (2023:11857) argue that advancements in technology have brought significant change in many aspects of human life, and in education. They further state that early exposure to knowledge helps learners to develop strong skills; as a result, ICT should be integrated in primary schools to improve effective teaching and learning. Similarly, Ojo and Mathabathe (2021:24) raised concerns that outdated Social Sciences textbooks and the lack of resources for teaching History and Geography can be alleviated through the implementation and usage of technology in education. As supported by Dlamini (2020:29), in the tangible world, a classroom in a knowledge-driven society cannot be complete without access to digital teaching tools, such as overhead projectors and other technologies used for pedagogical purposes.

The DBE developed three ICT-related education policies aimed at transforming teacher pedagogy in South African classrooms. These include the e-Education policy

(DoE, 2004), the Guidelines for Teacher Training and Professional Development in ICT (DBE, 2007), and the Professional Development Framework for Digital Learning (DBE, 2018). The e-Education policy targets turning public schools into e-schools by set deadlines to improve education quality in South Africa. Its primary goals are to ensure all learners become technology-competent by 2013 and to motivate teachers to integrate ICT into their teaching practices.

e-Education policy was implemented only after most schools had already integrated technology, demonstrating a missed opportunity for proactive leadership in educational transformation. In the same vein, Vandeyar (2021:44) asserts that the e-Education policy was only a symbolic addition to the curriculum policy and was not marketed as a compulsory implementation. The DBE's Guidelines for Teacher Training and Professional Development in ICT (2007:1) state that the prerequisite for successfully implementing the national school-based curriculum is for teachers to possess the know-how and skills in ICT. The objective of the Professional Development Framework for Digital Learning (2018:9) is to support teachers in using technological resources to simplify teaching and learning.

The Department of Education's policies aim to improve education, foster economic growth, and stimulate social development in South Africa by leveraging ICT (DBE, 2004:14). In 2015, the Gauteng Department of Education (GDE) embarked on a transformative journey by integrating ICT to improve teachers' practices and enhance curriculum delivery (Ntsobi & Nyamkure, 2025:67938). Meladi and Awolusi (2020:48) argue that ICT can serve as a tool to transform education in South Africa and explain its impact on teaching and learning within the country's education system.

On the contrary, Chomunorwa, Mashonganyika, and Marevesa (2023:92) point out that the South African government has an educational policy aimed at driving digital transformation, but its implementation remains a major concern. This is reinforced by Munje and Jita (2020:265), who state that ICT integration in South Africa remains a concern, leading teachers to question the Department's e-Education Policy for its direction and clarity. Similarly, Vandeyar (2021:45) stresses that the local district e-learning units fail to prioritise the execution of these ICT policies. Munje and Jita (2020:266) claim that the department must audit the experiences of individuals

towards ICT integration so that the department can understand what kind of assistance is needed.

#### **2.2.4 Social Sciences curriculum and ICT integration**

The democratic perspective in South Africa, focused on social transformation after apartheid, was promoted through widespread education. It involved integrating Geography and History into the Social Sciences curriculum to foster the holistic development of each learner as a democratic citizen of South Africa (Revised National Curriculum Statement Grades R-9 Schools, 2002:04). The aim of the Social Sciences curriculum in South Africa is to expose learners to the world beyond their imagination and help them to critically analyse their surroundings. History and Geography are imparted separately, providing concepts, skills, and subject-matter knowledge for each field, with each intending to arouse interest in the world (Department of Education, 2011:08).

Studying history in the General Education and Training (GET) Band helps learners develop a broad understanding of South African history, highlighting how the country's diverse past shapes the present. It enhances their historical awareness, enabling them to act critically and responsibly as citizens who respect human and environmental rights. Additionally, learners learn to analyse data from various sources, including contrasting perspectives on the same event or issue (Revised National Curriculum Statement Grades R-9 (Schools), 2002:04). Geography in GET supports learners in understanding the connection between people and their environment. It fosters attitudes and actions that recognise how political, social, economic, and environmental changes occur daily (Revised National Curriculum Statement Grades R-9 (Schools), 2002:04).

The Social Sciences curriculum aims to prepare learners to build a better future by challenging socioeconomic inequalities (such as racism and sexism) and establishing a non-racial, democratic society (Revised National Curriculum Statement Grades R-9 (Schools), 2002:04). Korkut, Dündar, and Tortop (2020:19) describe Social Sciences as disciplines that study the relations between people and their environment. Such inter-relations vary with time and place. Factors such as values, attitudes, and belief systems influence these interactions (Korkut *et al.*, 2020:19). Geography, history, human rights, and environmental education are part of the Social Sciences curriculum,

focusing on basic ideas, skills, and processes. It stresses how learners acquire knowledge and mobilises them to learn about their society and their surroundings, promoting inquiry-based learning. The main aim of the Social Sciences curriculum is to foster informed, sensible, and critical individuals capable of constructive engagement in a diverse and evolving society. It also ensures learners are well-prepared to contribute meaningfully to a just and democratic society.

The researcher has observed that this integration has helped learners understand more concepts during Social Sciences lessons and continue developing a strong understanding of their environment. Furthermore, teaching Geography and History remains a rich foundation for learning and teaching, equipping learners to address current social challenges. The researcher, as a teacher, has also seen learners develop a greater appreciation and value for how historical events and geographical factors impact their societies. Besides meeting educational goals, this curriculum helps create well-informed and active citizens essential for the twenty-first century.

To fulfil the goals of the Social Sciences, teachers need to incorporate ICT into classrooms to close the digital divide and enable learners to compete globally and advance economically (Donkor *et al.*, 2023:1875). Saviour and Abudulai (2022:29) contend that successful ICT integration depends on curriculum reform to ensure that only the most relevant ICT tools and software are used in teaching and are aligned with the curriculum. Ghanney and Mwinkaar (2019:18) note that the Social Sciences are particularly well-suited to integrating ICT because of their comprehensive curricula, which explore human existence both historically and in contemporary times, as well as global citizenship.

### **2.3 The benefits of ICT in Social Sciences teaching**

The adoption of ICT offers numerous pedagogical benefits, particularly in the context of Tshwane West District in Gauteng, South Africa, when it comes to the various needs of learners and contextual challenges that relate to the teaching and learning of Social Sciences that require innovation in a classroom and the curriculum delivery. The main aim of the Social Sciences is to teach learners how humans interact with one another and with their environment, and ICT provides learners with tools to engage meaningfully with their social realities and contemporary issues (Carrillo, 2020:19; Burbules *et al.*, 2020:273).

One key factor in ICT incorporation is its ability to promote learner involvement and comprehension. The study by Ghanney and Mwinkaar (2019:19) notes that ICT plays an important role in the teaching of Social Sciences and maintains that integrating technology with appropriate teaching approaches promotes learning. Similarly, Mensah and Osman (2022:113) postulate that the use of technology makes Social Sciences lessons more engaging, diverse, and well-presented in the classroom. In addition, technology improves the reliability and interest of learning environments, allowing learners to learn anytime, anywhere with their peers and preparing them to face the challenges posed by modern global competition (Bariham, 2019:53). The use of ICT in education is crucial because it provides learners with reliable learning experiences. This is supported by Karunakaran and Dhanawardana (2023:25), who avow that ICT integration could meaningfully enrich the teaching of Social Sciences and develop learners holistically. The teaching and learning of Social Sciences sometimes warrants the use of audio-visual aids to accurately represent and elucidate complex social phenomena. Moreover, Atubi (2022:3) argues that innovativeness makes the teaching of Social Sciences to be more practical. This is supported by Anim (2024:28), who states that multimedia in Social Sciences classrooms promotes active learning, as learning occurs more actively than through theoretical instruction.

Renner (2023:45) outlined numerous advantages of ICT in the Social Sciences education, such as improved learning and memorisation, increased contribution, and greater effort by both learners and teachers. ICT allows learners to get up-to-date information, enhance the quality of education, foster teamwork, cultivate 21st-century skills, and improve learners' attitudes towards learning. ICT integration also promotes high order thinking and problem-solving skills that are important in the Social Sciences curriculum. Asprilla and Yamil (2022:2487) demonstrate that integrating ICT into Social Sciences shifts learners from merely receiving knowledge to actively creating it. Overall, the incorporation of ICT into the Social Sciences equips learners to be active citizens in this digital era and prepares them with the skills needed to flourish in the digital economy.

### **2.3.1 Teaching of Social Sciences using ICT tools**

Globally, the teaching of Social Sciences has often relied on traditional teaching methods that do not integrate technology to enhance learners' academic performance (Abimbade, Olasunkamni, Akinyemi & Lawani, 2023:499). Social Sciences study

social phenomena that are difficult to illustrate and describe without visual aids like pictures, graphics, and sounds (audio-visuals). Traditional teaching approaches in Social Sciences lessons limit active engagement, causing teachers to worry about preparing learners for dynamic and integrative learning environments (Carrillo, 2020:18).

In the context of Iraq, Küçük (2023:47) affirms that today's generation is heavily reliant on technology in all aspects of life, necessitating its integration into the country's curriculum. In Kosovo, digital technologies are being integrated into primary education to assist learners' learning in the classroom, at home, or elsewhere, and as resources for teachers, both within and outside the classroom, for teaching and non-teaching activities (Orhani, Kolukaj, Saramati, & Saramati, 2023:185). Technology is seen as a powerful means of engaging learners and expanding their knowledge (Orhani, 2021:26). Despite the limitations faced by the Turkish government in integrating ICT in education, it was concluded that learners benefit from a technology-supported environment; hence, the integration of ICT was deemed necessary (Aljawadi, 2023:86). Kaur (2023:18) adds that in India, ICT is adopted to overcome the time and place constraints in learning situations. To promote teaching and learning of Social Sciences, technology-driven teaching should be adopted (Saviour & Abudula, 2022:28).

In Indonesia, Riyanto *et al.* (2022:8285) point out that an effective tool to use in Social Sciences classroom is Google Classroom (GC). de Oliveira and Schmitt (2023:22) describe GC as a free suite of productivity tools, including documents, email, and file storage, created to help teachers and learners to improve their communication in education. Piaralal *et al.* (2023:311) state that GC combines online learning with traditional teaching, allowing teachers to devote sufficient time to their learners and reducing the heaps of paperwork they handle. Through GC, teachers and learners can engage through chat, and assignments can be forwarded so that learners can access them (Nidup, 2022:9). On the other hand, Dojo is another alternative to GC and is a prominent example of a classroom platform. Dojo is described as a digital tool that enables both teachers and parents to share information for educational purposes (Pratista, 2023:78).

In Africa, Ghanney and Mwinkaar (2019:18) claim that Social Sciences teaching methods have been criticised as unproductive and unsuitable for 21st-century education. Additionally, the authors stated that today's learners are steeped in technology; they possess technical skills and learning styles that are not always compatible with present teaching methods. In Sri Lanka, the effective teaching of Social Sciences is facilitated by technological tools such as PowerPoint, projectors, computers, virtual learning, and internet browsing, which help learners gain a comprehensive understanding through the experience (Karunakaran & Dhanawardana, 2023:26). In Nigeria, interactive whiteboards and storytelling are employed to concretise abstract concepts in the teaching of the Social Sciences, thereby making learning much easier (Salui & Odjugo, 2020:177; Abimbade *et al.*, 2023:500). In this sense, Ghanney and Mwinkaar (2019:19) averred that Social Sciences teachers should be aware of the transformations technology has brought about in today's world and seek to reflect them in their classrooms.

In Gauteng, South Africa, various initiatives were implemented to enhance support for integrating ICT into the teaching and learning of Social Sciences. Chibambo, Divala, & Fick (2026:2) observed that the South African government together with DBE responded to ICT integration in education with different projects such as the Gauteng Online Project (GOP), the Khanya Project (KP), the School Net Project (SNP), INTEL Tech Education Programme (ITEP), the Google Education Project (GEP), the ICT4RED Project, and the Micro Partnership Learning (MPL) as ways to digitalise the schools. Despite these efforts, Rasool and Naidoo (2024:10) criticise the South African government, noting that although policies and strategies are in place, implementation is slow and there is a deficit of human capacity to implement them.

### **2.3.2 Teaching methods aligned with ICT**

Advances in technology have led to significant changes in education (Ray & Sikdar, 2023:7). Kappor and Gusain (2020:57) maintain that the combination of education, innovation, and technology is commonly utilised to define upcoming trends. Wang (2022:270) stipulates that today's educational systems emphasise the significance of creativity in the classroom, where technology is used to support learner-centred learning. Ray and Sikdar (2023:7) posit that effective teaching methods are crucial for learners' academic progress, keeping them stimulated, and enhancing their character and inventiveness. This idea is supported by Zbuzant (2024:176), who maintains that

teaching is the most challenging task and that teachers must be equipped with modern teaching methods to sustain order and an enthusiastic classroom that reflects effective teaching and learning.

Ray and Sikdar (2023:8) affirm that teaching methods are strategic frameworks that teachers use to plan the integration of educational programmes to achieve targeted objectives. Sukadi and Budiarta (2025:2), in their study, examined the role of the pedagogy of love in enhancing the teaching of Social Sciences in the context of digital technology, and they maintain that the subject cannot be separated from the role technology plays in the transformation of the educational landscape. Technology has changed how curriculum is delivered, and in the modern world, teachers cannot do without it (Sangma, 2024:4420). Thus, integrating ICT into education calls for new teaching approaches that are harmonious with technology.

Orhani (2021:26) states that e-Learning is a structured field of electronically delivered learning experiences, primarily through the internet. According to Aidoo, Tsyawo, Quansah, and Boateng (2022:68), the flipped classroom approach is an effective teaching method for enhancing learner participation. Baig and Yadegaridehkordi (2023:2) maintain that flipping a classroom entail turning the traditional classroom on its side, and outside the classroom, learners are encouraged to actively study new material by recording or reviewing lessons. The flipped classroom approach can improve learners' participation, academic performance, and critical thinking skills (Jiang *et al.*, 2020:1218). Moreover, to promote effective learner participation, teamwork, and involvement, the flipped classroom methods that use technology can be integrated (Liu & Nan, 2024:88).

Another instructional approach linked with ICT is blended learning. Iyer, Singh, and Malhotra (2021:114) define blended learning as a widely used method that integrates in-person and online education. It is student-focused, adaptable, and can enhance the classroom experience.

Kamaludin *et al.* (2023:78) state that asynchronous and synchronous are two forms of learning. Malchykova *et al.* (2022:760) describe synchronous learning as a direct link between the teacher and the learner in real time, which allows teachers to follow the feedback of learners during the discussion process. Wahyuni and Suwandi (2023:773) state that to accommodate diverse learning styles, asynchronous and synchronous

methods can be employed, using technologies such as video conferencing and virtual discussion platforms. Implementing various teaching methods in Geography instruction during 2020 has enhanced real-time learning and promoted active learner engagement (Perv & Grünthal-Drell, 2020:23). In an asynchronous learning environment, teachers provide learners with access to audio or video lectures, handouts, publications, and PowerPoint presentations. This material is made readily available at all times and from any location (Woo & Reeves, 2008:178).

The advantage of synchronous learning is that it offers learners quick access to teachers and the ability to share information in real time. Francescucci and Rohani (2019:61) claim that synchronous virtual learning allows teachers to provide instant feedback and increase interaction with learners. This approach helps learners feel more connected to their teachers and classmates, which in turn boosts their engagement in a virtual environment that resembles a traditional classroom. However, this type of platform demands a specific date and time for meetings, which infringes the promise of “anytime, anywhere” learning in online courses (Schreder, Alonzo, and McClure, 2022:3). On the other hand, asynchronous refers to pre-recorded content that allows teachers and learners to engage with their schoolwork at different times and promotes self-study among learners (Chaudhury, 2023:215).

A virtual museum can be deployed to promote the teaching of Social Sciences. Utkugün (2022:70) defines a virtual museum as an interactive website that provides learners with digital copies of artwork, historical items and documents, and data about these works. Furthermore, because of their advanced interactive technology and three dimensions, virtual museums are regarded as a useful and effective teaching method. In the context of using games in the teaching of Social Sciences, Ray and Sikdar (2023:8) state that gamification of education is an ICT-based method that combines gaming elements with learning contexts to enhance learner engagement. Confirming the above assertion, Gaonkar, Khan, Manisha and Singh (2022:64) state that gamification involves integrating game principles and concepts into learning to improve learners' interest in learning. Gamification, as an ICT-aligned teaching method, can promote a reward-based learning culture in the Social Sciences by enabling learners to participate in game-based activities that improve their knowledge and experience (Christopoulos & Mystakidis, 2023:1223).

## **2.4 Requirements for ICT integration in teaching Social Sciences**

Serezhkina (2021:1) states that the growth of digitisation in education and the rise of information technology necessitate modern skills for all participants, as the deployment of digital skills is now a key requirement for a professional's effectiveness. It is essential for the education system to remain ahead of the curve to prepare learners for future needs; as a result, a modern teacher must adapt to changing circumstances, be conversant with novel technologies, and be able to apply them effectively based on teaching goals and objectives (Serezhkina, 2021:1). Consequently, it is necessary for teachers to have technological skills so they can successfully incorporate ICT into their pedagogies to enhance the learning experiences of learners.

### **2.4.1 Teachers' digital skills**

The disruptions that are brought by globalisation, technology, migration, competition, and political disturbances have necessitated changes in social order and individual needs, resulting in educational advancements (Öksüzoglu & Tünkler, 2022:659). In keeping up with these changes, both teachers and learners should cultivate 21st-century skills. Mopara and Sanrattana (2023:95) highlight the 21st-century skills necessary for learners to keep up with rapidly changing technology, including critical thinking, digital skills, problem-solving, flexibility and adaptability, data literacy, and verbal and digital written communication.

Erol (2021:90) states that 21st-century competencies encompass the knowledge and skills necessary for success in both work and life. To nurture 21st-century competencies, teachers ought to develop creative ways to engage learners in their learning, enhance their pedagogical skills, and incorporate ICT into their lessons. Additionally, the 21st-century teacher is perceived as an effective communicator and pedagogical specialist who uses technology, teaches learners how to learn, and connects knowledge to learners' reality (Öksüzoglu & Tünkler, 2022:659-660). Similarly, Saliu and Odjugo (2020:176) state that an effective Social Sciences teacher should be well-educated, have sound subject knowledge, and be mindful of their roles at work. They emphasise that Social Sciences teachers should plan thoroughly, be professional, show care for their learners, and know how to teach with technology in the 21<sup>st</sup> century (Saliu & Odjugo, 2020:176). The study by Erol (2021:91) highlights key 21st-century competencies that can be nurtured through the incorporation of ICT

in the Social Sciences: critical thinking, creativity and innovation, communication and collaboration, problem-solving skills, ethical decision-making, and self-directed learning.

The other two requirements for ICT incorporation in teaching Social Sciences are technological literacy and proficiency. According to Malotiya *et al.* (2023:66), digital literacy is the understanding of digital tools and their application in both professional and personal life. Someone with digital literacy competencies may, for instance, use digital tools and applications to search for information, communicate, collaborate, and solve complex issues (Jaafar *et al.*, 2023:27). Teane (2024:2) avers that the terms 'digital literacy', 'electronic literacy', and 'technological literacy' are used interchangeably and refer to the attainment and usage of technology for effective teaching. Digital literacy has numerous advantages, including the development of high order thinking skills that are significant for success in the 21st century. A learner who is digitally literate can analyse data using logic and intellectual acumen to evaluate its importance and establish its relevance (Mokhtari, 2023:161).

Deschènes (2024:2-3) notes that e-Literacy can improve creativity, problem-solving skills, job performance, and collaboration. Also, the study reveals that people with high levels of digital literacy happen to be more confident when adopting technology and demonstrate positive attitudes towards technological use. Nikou, De Reuver and Mahboob-Kanafi (2022:372) also reveal that digital literacy in the workshop influences employees' decisions to adopt digital technology for work. Furthermore, low levels of digital literacy make people more hesitant to use technology and struggle to use it at work. Deschènes (2024:3) is correct to posit that the development of e-Learning platforms for personal and professional growth in the workplace is determined by e-Literacy. Deng and Yang (2021:2) describe technological proficiency as an individual's ability to engage and use ICT most effectively and professionally in the learning environment. (Tukur Abba *et al.*, 2019:1) view proficiency as the skill teachers need to utilise technological tools in their classrooms. Emelogu *et al.* (2022:3) define technological proficiency as a teacher's ability to incorporate ICT into teaching to enhance productivity in the learning environment. For teachers to successfully conduct research, collaborate, publish, and deliver online curricula, they need to incorporate emerging technologies (Emelogu *et al.*, 2020:3). Overall, technological literacy and proficiency in teaching are unavoidable competencies for modern teachers to integrate

technology to ensure that learners reach their potential and they are fully supported in their learning to prepare them for a technology-driven economy (Ahmad, Mehmood, & Ijaz, 2023:84).

#### **2.4.2 Social Sciences teachers' perceptions and attitudes towards technology**

The attitude of teachers concerning technology plays a very important role in determining the success of technological integration in education, including its usage in Social Sciences classrooms. Within the Technology Acceptance Model (TAM), attitude is considered a key factor that determines the approval or dismissal of technology, as it facilitates the user's beliefs and actual application of the system (technology) (Bekos, 2025:2). Khan, Waqar, Chema, and Butt (2022:3) describe teacher attitudes and beliefs as influential constructs in classrooms, as attitudes influence professional practice and are important for the introduction of new technology. Davidovitch and Yavich (2021:333) describe attitude as a learned psychological state, primarily shaped by how an individual thinks and processes emotions. Over time, attitudes are influenced by factors like lived experiences. Factors such as confidence, knowledge, and beliefs influence teachers' decisions to adopt and implement technology in the classroom (Chaerani *et al.*, 2024:2105). While perception concerns cognitive interpretation, attitude describes a person's emotional readiness and motivation to act (Nxusa *et al.*, 2025:127).

The negative attitude towards the integration of ICT stems from past failures, inadequate training, and a lack of technical assistance experienced by teachers (Chirwa & Mubita, 2021:159). However, professional teacher development, as well as peer collaboration and the sharing of successful stories about integration, can foster greater positivity and willingness to integrate ICT (Mertala, 2019:180). Serin and Bozdağ (2020:61) averred that teachers' professional position does not alter their attitudes towards the incorporation of technology in the classroom. Moreover, positive attitudes toward ICT are evident when teachers are willing to experiment with digital tools and adopt innovative teaching methods (Adeniyi & Mojirade, 2022:3; Bakare & Olanrewaju, 2022:3).

When teachers are familiar with technology, their perceived usefulness (PU) of technological tools increases (Davis, 1989:320). Cifuentes-Rojas *et al.* (2019:64) observed that when teachers are familiar with technology, they tend to have a positive

attitude toward Computer-Assisted Language Learning (CALL). Furthermore, teachers' experience boosts their confidence in using technology in the classroom. They also observed that this experience acts as motivation to adopt technology and leverage its educational benefits. Similarly, Tran, Pham & Dinh (2023:62) noted that the instructional usefulness and intrinsic motivation of CALL have led teachers to adopt it. This has led teachers to wish to use technology frequently.

The manner in which an individual views, interprets and comprehends a phenomenon is referred to as perception (Nxusa *et al.*, 2025:127). In the context of incorporating ICT into the Social Sciences classroom, Erdogan and Serefli (2021:235) found that the teacher's perception plays a critical role in determining whether the integration is successful. Several studies reveal that teachers view technology as an effective tool for promoting learner engagement during classroom interactions (Donkor, Ghanney, & Dwamena, 2023:1875). Similarly, Gunzo (2020) and Tarman *et al.* (2019:739) describe ICT as an innovation that is valuable and capable of enriching the curriculum, also deepening learners' subject understanding.

#### **2.4.3 Leadership as a requirement for effective ICT integration**

The effectiveness of ICT incorporation in the classroom depends on how well it is embedded into the system. However, having resources alone does not warrant successful ICT incorporation. It also needs committed leadership that can communicate and foster teachers' attitudes, skills, and perspectives toward ICT use (Baglama *et al.*, 2022:1; Sederevičiūtė-Pačiauskienė *et al.*, 2021:3).

Studies reveal that leadership style is vital for the successful incorporation of technology in schools. Grady, Mike, Jacobson and Leibel (2021:28) and Hurtado-Mazeyra *et al.* (2022:1) argue that leaders who are innovative, transformative, and adaptive in their approach are most likely to establish an environment in which teachers feel supported and encouraged to adopt and use technology. Baglama *et al.* (2022:3) and Sosa-Díaz *et al.* (2022:1) maintain that schools with leaders who ensure teachers have access to technological resources thrive. In such a school environment, teachers are motivated to experiment with technological tools in their classrooms while engaging learners effectively and focusing on academic outcomes.

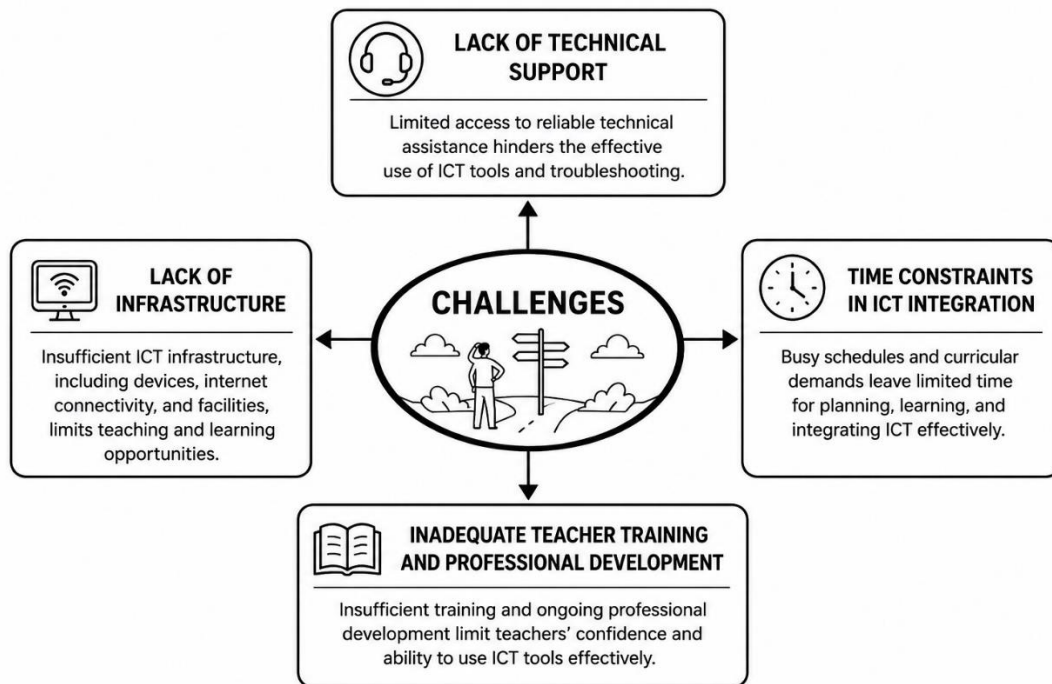
The international experience also reveals that for ICT incorporation to be successful in educational systems, it should be supported by reform agendas. For instance, the

Ministry of Education in Oman has committed to prioritising ICT as part of its transformative agenda (Alshidi & Rashid, 2025:166). Studies confirm that school leaders who provide clear direction, engage in strategic planning, support ongoing teacher development, and promote a teacher-readiness culture increase the likelihood of successful ICT incorporation in their schools (Al-Adwan, Nofal, Akram, Albelbisi & Al-Okaily, 2022:4). This approach is well aligned with Oman's Vision 2040, which positions technology as a primary driver of academic excellence and innovation (Alshidi & Rashid, 2025:166).

From this perspective, it is clear that access to infrastructure alone is insufficient for ICT integration. For schools to succeed in integrating ICT, strategic and innovative leadership is essential. Strategic leadership, as described by Özdemir *et al.* (2020:401) and Lomos, Luyten & Tieck (2023:4), encompasses the linking of the school vision to ICT goals. Without such leadership, ICT integration in schools risks becoming merely symbolic rather than more transformative.

## **2.5 Challenges related to ICT adoption**

The application of Information and Communication Technology (ICT) in classrooms, including its incorporation in the teaching of Social Sciences, is accompanied by numerous challenges. In the same vein, Nxusa, Moreeng and Chimbunde (2025:127) state that teachers encounter several hurdles when incorporating ICT into the curriculum. Figure 1 illustrates the challenges teachers experience when integrating technological tools, including insufficient technical support and training, negative attitudes, inadequate infrastructure, and limited time.



**Source:** Own Compilation (2026)

**Figure 1:** Challenges identified

### 2.5.1 Lack of technical support

In many schools, the lack of technical support is a significant issue, leading to conflicts between learners and teachers and hindering the implementation of the ICT curriculum. Without technical support and repairs, teachers cannot use essential technology for a time and may become discouraged (Shilongo, 2023:251). Saha (2023:795) points out that technical support is vital to ensure the successful adoption of ICT in any institution; hence, without specialised personnel, these institutions fail to sustain the viability of ICT use in education. Shilongo (2023:251) states that even with support, a lack of expertise can hinder teachers from using technology. The system collapses drastically due to technical problems with the computers, which may have accumulated over time due to a lack of competence in repairing them. Consequently, ongoing technical challenges may lead teachers to avoid implementing technology due to fear of failure, feeling overwhelmed, and inadequate training to integrate it into the curriculum (Hart, 2023:2). This clearly shows that the lack of technical expertise not only affects the functionality of digital tools but also further destabilises teachers' confidence and willingness to adopt ICT in their pedagogies. Therefore, to ensure

sustainable and effective ICT incorporation in education, it is vital to strengthen both technical support and teacher training.

According to Yuliani and Mercuriani (2021:2), the lack of technical knowledge and competencies in teachers hinders them from implementing ICT into the curriculum. This condition may lead to teachers' resistance to change in learning activities, particularly the use of ICT in learning. Factors such as a lack of e-literacy, support, and training among teachers in schools mostly lead to a failure to integrate technology. Hence, there is a need to address the lack of technical support and training so that teachers can implement ICT to enhance their teaching abilities in Social Sciences classrooms (Alejandro, Perez & Flora-Mae-Rivera, 2023:564).

### **2.5.2 Lack of Infrastructure**

Lomos *et al.* (2023:2) describe ICT infrastructure as the availability of computers, internet connectivity, and other ICT-related facilities. Besides, ICT infrastructure remains the main challenge to teachers using ICT for learning and e-learning, particularly in developing educational settings. Mhlanga, Denhere, and Moloi (2022:3) uphold that the lack of ICT infrastructure leads to the failure of ICT adoption in education. Kennedy (2023:861) conducted a study on the challenges of ICT incorporation in teacher education, finding that factors such as poor internet coverage and insufficient equipment impede ICT adoption in the classroom. Zulu *et al.* (2025:146) maintain that the procurement of required tools, such as software and internet connectivity, can be limited by funding, thereby creating resource constraints. This is supported by Rafeeq and Ali (2021:29), who state that when there is no accessibility to ICT resources, the integration process is compromised.

Only 1% of sub-Saharan Africans have internet access due to impediments such as unreliable electricity, limited connectivity, inadequate funds, insufficient space, personal skills issues, poor security, the high cost of installing ICT devices, and poor maintenance (Ntorukiri *et al.* 2022:3). Addai-Wireko *et al.* (2020:5) contended that such limits unpleasantly hamper the integration and usage of technology in educational institutions. In the South African context, Kayembe and Nel (2019:80) found that the incorporation of ICT is delayed by a lack of funding and infrastructure. Their findings recommend that the government of South Africa should prioritise funding and policies to enhance infrastructure, technical support, financial capacity,

and professional training to equip teachers to contribute to the fourth industrial revolution (4IR).

### **2.5.3 Time constraints in ICT integration**

Time is a critical barrier to integrating ICT into the curriculum. While access to technological tools is important, their successful integration is highly influenced by the time allocated to teachers. Insufficient teaching time is seen as a deterrent to the effective incorporation of ICT in teaching and learning, including its use in Social Sciences classrooms (Nxusa *et al.*, 2025:128). According to the Department of Basic Education (CAPS) (2011:6), Social Sciences has three hours per week and ten weeks per term, thus receiving 30 hours of teaching time. This indicates that each ten-week term for History and Geography contains 15 hours each. Zunica (2023:2) notes that time is a serious constraint for teachers, as they need to test how new technologies work and prepare to integrate them thoroughly into their pedagogies. Similarly, Hashemi and Kew (2021:79) affirm that teachers must test electronic equipment before lessons begin, a process that can be time-consuming. In this case, Social Sciences teachers may be prevented from implementing ICT into their curriculum.

Salehi and Salehi (2012:40) describe the lack of class time as a challenge that hinders teachers' ability to incorporate ICT into the curriculum, resulting in issues such as lack of motivation and poor time management. Likewise, Bhatia, Konidena, Krishna, Shanbhog, and Singh (2023:16585) categorise time pressure, planning, resistance to change, and access to resources as hurdles to technology adaptation. The design of the Social Sciences curriculum does not allow sufficient time to integrate technology (Smadi & Raman, 2020:2). To tackle these challenges, schools should adopt block schedules and support Social Sciences teachers so they are prepared to incorporate technology.

### **2.5.4 Inadequate teacher training and professional development**

The integration of ICT tools into the Social Sciences classroom in primary education is an important step toward equipping learners for a technology-driven future. However, the lack of teacher training and development is a serious predicament to the adoption of ICT in the teaching space. Several studies show that a lack of suitable training renders teachers not well equipped to use ICT tools effectively. As far as professional development, support, and training are concerned, Ajani and Govender

(2023:118) state that initial teacher education alone cannot sustain the education system. Therefore, to remain up to date in their field, teachers should participate in ongoing upgrading programmes to incorporate ICT into their pedagogy. Mathebula *et al.* (2025:57) discovered that inadequate teacher development programmes remain a serious hurdle to effective ICT incorporation in education, as they fail to emphasise the importance of teaching strategies, particularly the application of technology in teaching and learning. The teacher's professional development of is important for effective utilisation of ICT in the classroom (Mustafa *et al.*, 2024:3). Ajani (2022:35) describes teacher professional development programmes as a vehicle that can be used to attain classroom management and learner academic performance in schools. According to Jimenez-Sierra *et al.* (2023:2), professional development prepares teachers for pedagogical transformation and enhances learner achievement. Makhananesa and Sepeng (2022:261) argue that teachers' professional development programmes assist in better understanding and applying information and skills in the classroom. ICT-based professional teacher training enhances classroom practices and subject content (Purwianingsih, Novidsa & Riandi, 2022:212). Similarly, Marapao and Excelise (2025:5297) maintain that professional development is imperative for ensuring that teachers remain proactive in responding to emerging educational developments through sustained acquisition of new information, skills, and capabilities.

Kalogiannakis and Papadakis (2019:114) assert that integrating ICT requires more than just technological knowledge; it calls for teachers to understand and connect technology, subject-matter knowledge, and teaching methods in ways that demonstrate how they work together. According to Nguyen, Hitendra and Yeh (2023:92), when teachers have enhanced ICT knowledge and competencies, it becomes easier to select suitable technological tools for curriculum delivery and learner achievement. On the other hand, Mdingi and Chigona (2021:98) state that many newly qualified teachers fail to incorporate ICT into their classes due to inadequate training. The contributing factor is that teachers do not have the necessary specialised skills to incorporate ICT into their lessons. In the same vein, Teane (2024:3) stipulates that many professional development programs for teachers did not succeed simply because they were not guided by the necessary knowledge teachers need.

### **2.5.5 Proposed solutions at the school level**

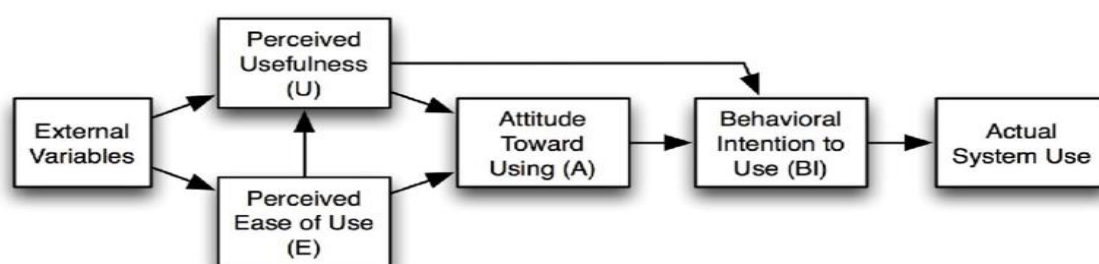
The literature highlights school-level solutions particularly relevant to township schools in Tshwane West District, Gauteng, South Africa. The core idea of these solutions is to enhance capacity and strengthen school leadership to support ICT integration. Studies indicate that for effective ICT integration, ongoing professional development should focus on digital leadership, ICT application, and policy implementation. This helps schools better support and oversee ICT use in classrooms (Rahim *et al.*, 2020:2; Wang, Tigelaar & Admiraal, 2022:510). In Tshwane West District, where school leadership is vital to implementing departmental directives and classroom practices, it is essential to establish a shared vision for ICT integration through targeted training.

Furthermore, another solution, which is very important to ensuring that ICT incorporation occurs and is successful at the institutional level, is the provision of ICT-related tools and infrastructure with support from government funds. The studies stress that the procurement of ICT equipment cannot be achieved by under-resourced schools independently; therefore, the educational authorities should intervene to ensure that schools have access to computers and other technologies (Jerry & Yunus, 2021:154; Tsimba, Mugoniwa & Mutembedza, 2020:2). Moreover, the reviewed studies propose a dire need for technical and pedagogical support for teachers at the school level. Schools should have ICT-trained staff who can assist teachers with technical matters and on how to use technological tools effectively in the classroom (Rahim *et al.*, 2020:2; Wang *et al.*, 2022:271). The regular maintenance of ICT tools at the school level is another important factor in ensuring the sustained use of ICT in schools (Arreerard, 2022:747; Luo, Zuo & Wang, 2022:1128). Overall, these school-based solutions reveal the importance of school leadership, sufficient technological tools and ongoing teacher training in ensuring the sustained implementation and usage of ICT in schools. In this regard, to further explore Social Sciences teachers' experiences of integrating ICT tools into their teaching pedagogies, the well-known TAM is employed in this study, as explained in the next section.

### **2.6. Theoretical framework**

The TAM, originally developed by Fred Davis in 1985, is the ideal theoretical framework for this study as determined from the literature review (Abuhassna, Yahaya, Zakaria, Zaid, Samah, Awae & Alsharif, 2023:132). Furthermore, the authors state that TAM was founded on Fishbein's 1975 Theory of Reasoned Action (TRA) and Ajzen's

1985 Theory of Planned Behaviour (TPB) (Abuhassna *et al.*, 2023:132). TAM integrates two theories (TRA and TPB) to discover the cognitive and psychological factors influencing users' adoption of new technologies (Habibi, Abdul Razak, Yusop, Mukminin, & Yaqin, 2020:1129). This theoretical model is very useful for elucidating the factors that influence human behaviour in adopting or rejecting technology (Zin *et al.*, 2023:2). TAM was established to examine the interdependent relationships among variables influencing technological acceptance and determinants of actual behaviour (Kemp, Palmer, Strelan & Thompson, 2024:2112). The main purpose of this model is to show that perceived ease of use, perceived usefulness, and attitudes concerning using a system can be used to measure users' intentions to accept new technologies (Zin *et al.*, 2023:2). In the context of this study, TAM was used as a framework to assess Social Sciences teachers' experiences in integrating ICT tools into their pedagogy, how ICT can enhance teaching and learning, the training, support, and professional development received by teachers, and the ICT challenges experienced by teachers. Figure 2 below shows the TAM model, which illustrates the relationships among the variables.



Source: Davis (1985)

**Figure 2:** The Technology Acceptance Model

This model in Figure 2 illustrates the relationship among variables that influence the interface between people and technological systems. Similar to the model above, each variable is described in terms of its contextualisation:

- i. External Variable (EV): When incorporating technology into education, external factors include challenges experienced by teachers that are outside their control. As Kuo *et al.* (2020:280) note, external variables such as users' traits, user habits, system characteristics, environmental factors, and convenience might influence users' views of usefulness and ease of use. It is to be noted that these determinants can directly or indirectly influence cognitive beliefs.

Hashemi and Kew (2021:78) outline other hurdles, not restricted to a lack of effective training and limited time to integrate ICT into teaching and learning.

- ii. Perceived usefulness (PU): According to Davis *et al.* (1989:320), perceived usefulness (PU) refers to a user's subjective probability that employing a given application system will enhance his or her work performance within an organisational setting. Furthermore, an individual will adopt new technology if they view it as useful for teaching and learning. Triyanti and Widhiyani (2025:294) state that when users perceive the system as enhancing efficiency, they are more likely to accept and use it to support this. Kuo *et al.* (2020:280) posit that PU directly affects users' attitudes toward using a new system.
- iii. Perceived ease of use (PEOU): According to Davis (1989:321), perceived ease of use (PEOU) is the extent to which the system user expects it to be free from effort. There is no way an individual can develop a positive attitude if using a particular technology in the classroom is not easy. The easier the system is to use, the more it will be accepted, and the more it will enhance performance (Utari & Wirakusuma, 2024:2). Kuo *et al.* (2020:281) agree with Davis (1989:321), asserting that the user's subjective perception of how easy a technology system is to use is known as perceived ease of use. When new technology is easy to utilise, users develop more confidence and a sound attitude toward it. Users would show a positive attitude towards new technology. Furthermore, both PU and PEOU have advantages in attitudes toward use.
- iv. Attitude towards use (ATU): Attitude is described as positive or negative feelings experienced by a person concerning a particular target behaviour. Harsanto *et al.* (2023:30) support the above assertion, stating that the attitude towards utilising is described as an attitude toward a system, which might take the form of rejection or acceptance. Perceived usefulness, perceived ease and external variables affect an individual's attitude toward ICT integration in a classroom.
- v. Behavioural intentions (BI): Yap and Kamaruddin (2023:638) describe behavioural intentions as an individual's deliberate plan to extend the effort to

carry out a certain action, with these intentions derived from a normative construct and a personal evaluative. The actual behaviour an individual will exhibit in the classroom is closely connected to intention.

- vi. Internal variables (IV): The internal variables directly influence ATU concerning utilising technology. The variables associated with the IV include individual factors such as self-efficacy, literacy level, motivation, individual beliefs, and anxiety.
- vii. Technological use (TU): Kuo *et al.* (2020:281) suggest that technological use is when the behavioural intention to deploy technology is clear, and the user would utilise the technology more often and for longer periods.

Likewise, Harsanto *et al.* (2023:29) strongly stressed that the TAM framework posits that a person's behaviour influences the attitude towards the use (ATU) of technology, which directly manifests in individuals' attitudes towards ICT integration. Zaineldeen, Hongbo, Koffi and Hassan (2020:5061) state that TAM mainly focuses on explaining the approach of integrating a specific technology. Terblanche and Kidd (2022:1) maintain that gender and age play a crucial role in technology implementation. Mensah *et al.* (2020:2) state that Social Studies teachers failed to integrate ICT into the teaching and learning of the subject. Graham *et al.* (2020:2) stated that teachers who grew up using technology use it in their pedagogy as adults. Based on the above statement of the author, it is clear that a person's beliefs are important for technology adoption. The adopted theoretical framework, i.e., TAM, functions exceptionally well for this study, as it analyses and interprets information relevant to the research questions. The TAM helps establish the themes guiding this study in addressing the research questions.

## **2.7 Summary of the chapter**

This chapter presented an analysis of the incorporation of ICT in the teaching of Social Sciences in the South African context, covering three critical research sub-questions related to the support available to teachers, the technological tools utilised in primary schools, and teachers' perceptions of utilising ICT in classrooms in Tshwane West District in Gauteng, South Africa. Moreover, the chapter discussed the importance of the literature review in research, beginning with definitions of ICT and critically

examining the DBE policies on ICT integration in the teaching of Social Sciences. Also, the chapter tackled the Social Sciences curriculum and the integration of ICT, highlighting the benefits and different teaching methods aligned with ICT tools. Furthermore, the chapter covered the necessities for effective ICT integration, with a main focus on teachers' digital skills. This chapter does not turn a blind eye to the challenges related to integrating ICT into the teaching of Social Sciences, such as a lack of technical support, insufficient time, poor infrastructure, and teachers' attitudes. To locate these problems, a theoretical framework was employed in this chapter. Lastly, this chapter proposed a contextual perspective to analyse the complexities and advantages of utilising ICT in Social Sciences lessons, thereby providing an opportunity to capture the advantages and challenges faced in this dynamic educational environment.

In the following chapter, the focus is on the research methodology for studying Social Sciences teachers' experiences of integrating ICT tools into their pedagogy in the Tshwane West District in Gauteng, South Africa.

## **CHAPTER 3: RESEARCH METHODOLOGY AND DESIGN**

### **3.1 Introduction**

Chapter 2 reviewed the literature and established the theoretical foundation underpinning this study. Building on that foundation, this chapter presents and justifies the research methodology that guided the investigation into Social Sciences teachers' experiences of integrating ICT tools. The teachers' teaching pedagogies within the Tshwane West District of Gauteng Province form the gist of these assertions. The purpose of this chapter is not only to describe the methodological procedures adopted during the study. This approach explained why these procedures were considered appropriate for addressing the research questions and achieving the objectives of the investigation.

This study was conducted within an interpretivist research paradigm, using a qualitative phenomenological design to better understand teachers' lived experiences of ICT integration in their everyday classroom practice. From the researcher's perspective, it was important to select an appropriate methodology because the validity and trustworthiness of the results depended on methods that enabled participants to share their experiences. Also, to ensure systematic and ethical procedures for data collection, analysis, and interpretation. This chapter describes the research setting, research paradigm, research approach, research design, population, sampling procedures, data collection procedures, data analysis procedures, trustworthiness, ethical considerations and limitations of the study. Reference is made to the supporting appendices where applicable, namely, the University of South Africa Ethical Clearance Certificate (Appendix A), the Gauteng Department of Education permission letter (Appendix B), school permission letters (Appendix C), participant information sheet (Appendix D), informed consent form (Appendix E) and the semi-structured interview schedule (Appendix F). These methodological processes together provide the foundation upon which the credibility, dependability and overall integrity of the study are built.

### **3.2 The location of the study**

The research was carried out in 3 primary schools in the Tshwane West District in Gauteng Province, South Africa, located at the northern tip of Tshwane Metro and comprising Soshanguve, Garankuwa, Mabopane, and Winterveld. The research

focused on Social Sciences teachers' experiences of integrating ICT tools into their pedagogies in the Tshwane West District.

### **3.3 Research methodology**

According to Patel and Patel (2019:49), research methodology is known as a scientific and logical process used to solve a research problem through a set of steps. It provides a structured framework for conducting research and guides researchers in their pursuit of understanding and the generation of new knowledge (Botlhale, 2019:236). In the same vein, Schwardt (2024:2) highlights that methodology is a coherent research strategy that defines principles and approaches governing the research design, data collection, analysis, and interpretation. The primary focus of the methodology is to explain how research is conducted within the chosen paradigm, in accordance with the guidelines provided by the theoretical framework. Methodology not only facilitates the production of valid and reliable outcomes but also ensures a deeper understanding of both the product and the process of scientific inquiry (Patel & Patel, 2019:50). It is for this reason that methodology ensures that research is conducted in a systematic and meaningful manner. In this study, a research methodology was used to guide the selection of the research design, paradigm, approach, methods (for data collection and analysis), and strategies.

#### **3.3.1 Research design**

The present study adopted a qualitative phenomenological research design because it offered the most appropriate methodological framework. This was important for exploring and understanding the lived experiences of Social Sciences teachers on the integration of ICT tools in their teaching pedagogies within public primary schools in the Tshwane West District in the Gauteng Province. Phenomenological research is concerned with understanding how individuals experience, interpret and give meaning to a particular phenomenon as it occurs within their everyday lives (Creswell & Poth, 2018:75). This study was not interested in ICT per se, but rather in the experiences, perceptions and realities of teachers using ICT as part of their classroom practice.

Cabrera-Tenecela (2023:38) describes research design as a method or plan for gathering information to address a problem statement. Additionally, the main purpose of the research design is to ensure that the gathered data addresses the research question(s) (Rezigalla, 2020:1). This study, titled "*Social Sciences Teachers'*

*experiences in integrating ICT tools in their teaching pedagogies in Tshwane West District*”, adopted an interpretive design because of its alignment with the research objectives and the types of questions posed to the study’s subjects. Although designs such as explanatory, descriptive, or exploratory ones offer meaningful methodological frameworks, they are not aligned with the study’s aims. For example, an explanatory design is suitable for a problem that has not been studied properly, that needs priorities, generates performance descriptions, and proposes a better research design (Olawale, Chinagozi & Joe, 2023:1835).

The selection of a phenomenological design was determined by the research problem and the objectives of the study. The research sought deep understanding of Social Sciences teachers’ perceptions of the integration of ICT, the opportunities it afforded, the challenges they encountered, and the contextual factors that affected its implementation in their schools. This understanding could only be achieved if participants were able to describe their experiences in detail rather than respond to predetermined variables or standardised measures. A phenomenological design allowed the participants to express their experiences while enabling the researcher to explore the meanings the participants attached to those experiences in their natural educational environments.

A descriptive design focuses on providing a thorough description of a specific phenomenon. It is best suited for creating detailed accounts of research participants’ experiences, actions, or events, without necessarily aiming to understand the reasons behind these occurrences or to establish links between events and behaviors (Hunter, McCallum & Howes, 2019). While the exploratory design is most common in emerging fields where there is little evidence in the field to explore, researchers become inquisitive to look for patterns, ideas or antecedent notions. Moreover, it is relevant when applied to the development of new disciplines (Orina, Mwangi, Sitati & Nyabola, 2015:33). Therefore, the interpretive design was well-suited to this study, as it seeks to explore complex social phenomena, understand human experience, and uncover the meanings that research participants attribute to these experiences (Gichuru, 2017:2).

From a researcher's view, each school encounters ICT integration uniquely. The variations in leadership support, access to digital resources, teachers’ technological

confidence, learner preparedness, infrastructure and institutional culture all impact on the way in which ICT is experienced in individual schools. A phenomenological research design was therefore ideal to capture the multiple realities and recognise that each participant's experience adds to a broader understanding of ICT integration in the Tshwane West District. The study sought to understand the common essence of teachers' lived experiences in different school contexts rather than to find one explanation.

The phenomenological research design further informed the methodological procedures adopted throughout the investigation. The methodology was informed by the intentional sampling of participants with direct experience of the phenomenon under study and by semi-structured interviews to elicit rich, detailed narratives, followed by thematic analysis to identify patterns and meanings emerging from participants' accounts. These methodological decisions ensured that the findings were firmly anchored in participants' experiences and also aligned with the interpretivist paradigm, qualitative descriptive approach, research questions and the overall purpose of the study.

### **3.3.2 Research paradigm**

The interpretivist research paradigm guided the study. This was regarded as the most appropriate philosophical stance for exploring the lived experiences of Social Sciences teachers integrating ICT tools into their pedagogies in public primary schools in the Tshwane West District of Gauteng Province. Interpretivism is premised on the notion that reality is socially constructed and that individuals understand and interpret their experiences according to the circumstances within which they live and work (Creswell & Poth, 2018:20). Rather than seeking one objective reality, the interpretivist paradigm acknowledges the existence of multiple realities shaped by participants' personal experiences, beliefs, interactions and professional contexts.

Research paradigms are crucial because they provide the philosophical orientations and structures that every researcher needs to make sense of the world (Yong *et al.*, 2021:5850). Park, Konge, and Artino (2020:691) believe that paradigms play the most important role in establishing the degree of scientific rigour and quality, as well as in determining directions for further research. These paradigms hold concepts unique to them, namely: ontology (views of reality), axiology (values in research), epistemology

(nature of knowledge), methodology (research process and rigour - research quality) (Park *et al.*, 2020:691). Kaushik and Walsh (2019:2) consider paradigms as both reality and a guide to the conduct of research. Within this study, the interpretivist paradigm was chosen as the most suitable framework for exploring the experiences of Social Sciences teachers integrating ICT tools into their pedagogies in the Tshwane West District in Gauteng, South Africa.

Interpretivism, on the other hand, is quite the opposite of the positivist paradigm, mainly because it is based on reasoning out what the individual actors mean and do in their daily social world (du Plooy-Cilliers *et al.*, 2019). This paradigm was appropriate for this study, as it enhances understanding of the incorporation of ICT tools for teaching and learning by enabling the researcher to capture the experiences and variations in how Social Sciences teachers perceive them. Through direct engagement with participants, the researcher gained practical knowledge of existing contextual factors, including access to resources, school culture, and pedagogical practices related to ICT adoption.

Ontology, epistemology, and methodology of interpretivism align well with the aims and goals of this study. Ontologically, interpretivism is based on the recognition of multiple realities, in which every teacher is unique in their reactions to ICT integration, depending on their culture and institutional contexts (Pervin & Mokhtar, 2022:420). Moreover, epistemologically, it posits that the knowledge constructed is not absolute but emerges through an active, participant-driven process of dialogue with participants, and, as such, the researcher can garner a thick, contextually rich description (Ikram & Kenayathulla, 2020:40). In terms of methodology, the interpretivist paradigm promotes qualitative techniques, like interviews, which emphasises depth and understanding rather than quantification (Sprake & Palmer, 2022:51). This paradigm explores the complexities of human experiences and the meanings participants attach to them (Alharahsheh & Pius, 2020:39). The adoption of the interpretivist paradigm in this study enables a deep understanding of Social Sciences teachers' experiences of integrating ICT tools into their pedagogies in the Tshwane West District. This paradigm provides a comprehensive framework for exploring the lived experiences and aligns with the aims of the study of producing practical understanding to improve ICT adoption.

From the researcher's point of view, the integration of ICT in Social Sciences classrooms cannot be justified only by the availability of technological resources or the existing educational policies. Teachers' experiences are affected by their professional backgrounds, confidence in employing digital technologies, institutional support, learner characteristics and the realities they face within their respective schools. These contextual realities differ from one school to another and from one teacher to another. As such, the study required a paradigm that could capture these multiple perspectives and acknowledge that each participant's experience adds to a broader understanding of ICT integration within the Tshwane West District.

### **3.3.3 Research approach**

The study adopted a qualitative research approach. This is because it was deemed the most appropriate way of exploring and understanding Social Sciences teachers' experiences of integrating ICT tools into their teaching pedagogies within public primary schools in the Tshwane West District. A qualitative approach is most appropriate for studies which seek to understand the participants' perspectives, meanings, experiences and interpretations of social phenomena in their natural settings rather than measuring relationships through numerical data (Creswell & Poth, 2018:41). Since the objective of this study was to gain an in-depth understanding of teachers' lived experiences, perceptions and professional realities surrounding ICT integration. A qualitative approach provided the flexibility required to explore these experiences in their natural educational contexts.

As Ugwu and Eze (2020:20) highlight, qualitative research differs from quantitative research in that it aims to uncover the appearance, characteristics, settings, and perspectives regarding the phenomenon under study, rather than cause-and-effect relationships or the number of occurrences. This approach is suitable for addressing the research questions of this study, which aimed to better understand the deep realities of ICT integration in primary school classrooms in Tshwane West District. Therefore, the researcher focused on the "why" rather than the "what" of social events and relied on participants as agents of meaning-making in their daily lives.

Oranga and Matere (2023:2) pointed out that the primary objective of qualitative research is to comprehend participants' experiences in a straightforward and analytical manner, using predefined approaches to answer research questions. Similarly, Stahl

and King (2020:26) state that the qualitative approach focuses on narrating participants' experiences. Oranga and Matere (2023:2) explain that meaning arises when qualitative researchers engage extensively with information. Moreover, qualitative researchers arrange thoughts into themes and categorise them, offering information verbally and quotations from documents and transcripts. They study information by identifying themes and primarily focus on connections between concepts and elements, utilising words rather than numbers. In qualitative research, knowledge cannot be generalised. Roald *et al.* (2021:70) regard this as one of the weaknesses of the approach. Mwita (2022:618) states that another weakness of qualitative research is that data analysis can be overly complex, and the results may be influenced by researcher bias.

From the researcher's point of view, understanding the teachers' experiences was not limited to whether ICT was available within schools. It was also important to understand how teachers perceived these technologies, how confident they felt when using them, the challenges they encountered and the contextual realities that affected their classroom practices. These issues are deeply embedded within teachers' daily experiences and therefore required a qualitative approach able to capture the richness, complexity and diversity of their perspectives.

The qualitative research approach gave a strong methodological basis to the phenomenological research design employed in this study. It also influenced the selection of purposive sampling, semi-structured interviews and thematic analysis. The data collected were representative of the real experiences of participants and meaningful in terms of answering the research questions and achieving the objectives of the study.

#### **3.3.4 Research strategy**

A case study was used in this qualitative design. Through the case study, the researcher was able to describe people's opinions, behaviours, and attitudes. Creswell (2018:476) describes a case study as a thorough analysis characterised by a limited system based on rich data collection. This study sought to investigate Social Sciences teachers' experiences of integrating ICT tools into their pedagogies in the Tshwane West District of Gauteng, South Africa. The use of a case study has received lots of criticism. According to Cohen, Manion & Morrison (2017:246), many critics hold that a

small number of cases is insufficient to ensure the reliability or generality of the findings. Although there are criticisms of case studies, this study demonstrates that a case study is suitable in this context, as it enabled exploration and a holistic understanding of the phenomenon in question (Chowdhury & Shil, 2021:191). To conduct a detailed investigation, a case study can be used, as it is a reliable research method. Chowdhury and Shil (2021:191) claimed that a case study research method can provide researchers with a holistic approach to real-life situations.

### **3.4 Research settings**

The study was conducted in 3 public primary schools situated within the Tshwane West District of the Gauteng Province, South Africa. The district was selected because it represents a diverse educational environment in which schools have progressively been exposed to national and provincial initiatives promoting the integration of ICT into teaching and learning. These initiatives have encouraged schools to incorporate digital technologies into classroom practice while simultaneously presenting teachers with new pedagogical expectations and professional responsibilities. The Tshwane West District provided an appropriate context within which to investigate Social Sciences teachers' experiences of the integration of ICT in their daily teaching practices.

The participating schools were selected because they offered information-rich environments in which Social Sciences teachers had practical experience of using, or attempting to use, ICT tools as part of curriculum delivery. Although the schools operated within the same education district and were subject to the same national and provincial education policies. The differences in school resources, infrastructure, leadership support, access to digital technologies, and teachers' professional experiences created varying contexts in which ICT integration was implemented. These contextual differences provided an opportunity to explore both the shared and unique experiences of teachers across school settings within the same educational jurisdiction.

This section focuses on discussing the role played by the researcher in selecting the participants, the sampling procedures for the study, the data collection strategies, and the data analysis approach. McMillan and Schumacher (2014:215) describe research methods as systems for designing studies and collecting data, as well as the techniques used to analyse data. Aspers and Corte (2019:140) state that, to better

understand a situation, a qualitative researcher should adopt a humanistic approach to the research question. Its primary goal is to provide a broader understanding of human emotions, experiences, attitudes, and behavioural patterns.

From the researcher's perspective, the selection of the Tshwane West District was informed not by accessibility but also by its relevance to the research problem. The district reflects many of the realities experienced by public primary schools attempting to integrate ICT into classroom teaching. Although schools have had access to digital resources through government initiatives, the extent to which these technologies are integrated into everyday pedagogical practice continues to vary. These differences created an appropriate setting for exploring the opportunities, challenges, and institutional factors influencing Social Sciences teachers' experiences of ICT integration. The study's focus on schools in the same district but with different contextual conditions enabled the generation of rich contextual insights while maintaining consistency in policy and curriculum implementation.

The research setting was congruent with the interpretivist paradigm, the qualitative phenomenological research design and the overall descriptive approach of the study. The study sought to understand teachers' lived experiences of integrating ICT in the teaching of Social Sciences. Contextual information relating to the participating schools, including participant distribution and school profiles, is supported by the institutional permission letters included in Appendix B (Gauteng Department of Education approval) and Appendix C (School permission letters).

Qualitative research has numerous data collection methods; however, in this study, semi-structured interviews were used. Firstly, the sampling method used is elaborated in the following section.

### **3.4.1 Population**

The target population for this study comprised all Social Sciences teachers employed at public primary schools within the Tshwane West District of the Gauteng Province. These participants were responsible for teaching Social Sciences and had experience of integrating, or attempting to integrate, ICT tools into their teaching pedagogies. The population was chosen because these teachers were directly involved in curriculum implementation and had practical knowledge of the opportunities, challenges and contextual realities related to ICT integration. The accessible population comprised

Social Sciences teachers from the 3 participating public primary schools that gave permission for the study, from which the final participants were selected through purposive sampling.

According to Willie (2024:75), a population is a larger group of individuals with similar characteristics within a given context, enabling researchers to gain a basic understanding of the demographic or institutional setting under study. The study population is the set of elements from which a sample is drawn. Each aspect with comparable characteristics has a fair chance of being chosen. In the context of this study, the population is considered a “targeted group”, and it is the set of elements that the researcher will focus on.

The selection of this population as stated in Table 1 was guided by the researcher’s belief that the most meaningful qualitative data can be obtained from participants who have experienced the phenomenon under study. Therefore, Social Sciences teachers were identified as the most appropriate population. This was because they were able to provide vivid descriptions of their classroom practices, professional experiences, institutional support, and the contextual factors that influence the integration of ICT in their schools. The selected population was directly aligned with the interpretivist research paradigm, the qualitative phenomenological research design, and the overarching aim of exploring teachers’ lived experiences of ICT integration.

**Table 1.** Summary of study participants

| <b>School</b> | <b>Social Sciences Teachers</b> | <b>Departmental Head</b> | <b>Total per School</b> |
|---------------|---------------------------------|--------------------------|-------------------------|
| School A      | 4                               | 1                        | 5                       |
| School B      | 4                               | 1                        | 5                       |
| School C      | 4                               | 1                        | 5                       |
| <b>Total</b>  | 12                              | 3                        | 15                      |

**Source:** Own Compilation (2026)

### **3.4.2 Sampling and sampling technique**

Sampling is the process by which the researcher deliberately selects specific information sources to collect data that help attain the research objectives (Gentles, Charles, Ploeg & McKibbin, 2015:1773). In this study, respondents were chosen purposively. The sample is a subset of the population considered for inclusion in the study (De Vos *et al.*, 2011:418- 425).

Purposive sampling is the process by which the researcher intentionally selects the participants based on the aims and objectives of the study. In this approach, the method enables the researcher to gather rich, detailed data to support an in-depth understanding of the research at hand (Benoot *et al.*, 2017:2060). Palinkas *et al.* (2013:543) define purposive sampling as a method used in qualitative research to identify and select information-rich cases to effectively utilise limited resources. The researcher chose the informants because they were well-informed and knowledgeable about the phenomenon under study. The sample comprised 3 primary schools in the Tshwane West District in Gauteng, South Africa. In this regard, 12 were Social Sciences teachers (4 per school) and 3 Social Sciences departmental Heads (1 per school). A total of 15 semi-structured participants, purposively sampled, were interviewed. These individuals had experience teaching Social Sciences with ICT integration in their pedagogy.

The selection of participants was based on purposive sampling, which was used to identify individuals who were capable of providing rich, relevant and experience-based information on the integration of ICT into Social Sciences teaching. The sampling strategy was suitable as the study's purpose was to explore the lived experiences of teachers who had direct experience of the phenomenon under investigation rather than to produce statistically representative data. Participants were selected based on their qualifications as Social Sciences teachers employed at the 3 public primary schools in the Tshwane West District and their practical experience integrating ICT tools into their classroom teaching. Only teachers who taught Social Sciences during the period of data collection and who were willing to participate in the investigation were included to ensure that the participants would contribute meaningfully to the study.

The researcher used purposive sampling to select participants who had the necessary knowledge and practical experience to offer detailed insights into ICT integration in real classroom settings. The study focused on teachers who, by virtue of their daily professional responsibilities, were confronted with the realities of curriculum implementation, use of digital resources, learner engagement and institutional support. This approach enhanced the depth, credibility and contextual richness of the data collected and was consistent with the interpretivist paradigm and phenomenological research design.

Details regarding the participant distribution across the participating schools, demographic characteristics, teaching experience, and ICT utilisation are presented in Table 2. This process was assisted by the participant recruitment procedures, which are further supported by the Gauteng Department of Education approval (Appendix B), school permission letters (Appendix C), participant information sheet (Appendix D), informed consent forms (Appendix E), and the interview schedule (Appendix F).

**Table 2.** Participants' profile

| Criterion                           | Description                                                                                                                                                                                                                 |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Teaching Experience                 | The participants were Social Sciences teachers with at least three years' and more experience in primary school teaching. This ensured that teachers have sound knowledge of the subject matter and ICT-related challenges. |
| ICT Exposure                        | The study included teachers with varying levels of ICT experience, ranging from minimal to advanced.                                                                                                                        |
| Employment in Tshwane West District | All participants were employed in the Tshwane West District of Gauteng, South Africa.                                                                                                                                       |
| Active Involvement in Teaching      | The participants were actively involved in teaching Social Sciences, ensuring their ideas were up to date with current challenges, educational trends, and accomplishments in incorporating ICT into their teaching.        |
| Willingness to Participate          | Teachers expressed their interest in participating in the process and sharing information and lessons learned in the interviews.                                                                                            |

**Source:** Own Compilation (2026)

The researcher employed homogeneous sampling since the study focused on only one population (teachers), not parents, as the focus was on Social Sciences teachers'

experiences in integrating ICT tools into their teaching pedagogies in Tshwane West District. Thus, Table 3 provides the inclusion and exclusion criteria to ensure the study's relevance. Nyimbili and Nyimbili (2024:91) described homogeneous sampling as a method used to minimise variation, simplify analysis and facilitate group interviews.

**Table 3.** The criteria for inclusion and exclusion

| Inclusion                                                                                                                                                                                                                                 | Exclusion                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Primary schools</li> <li>• Location (in Tshwane West District)</li> <li>• Social Sciences teachers</li> <li>• Gender (male and female) from different backgrounds and different races</li> </ul> | <ul style="list-style-type: none"> <li>• High school teachers</li> <li>• Non-Social Sciences teachers</li> <li>• Principals</li> <li>• Learners</li> <li>• Parents (SGB)</li> </ul> |

**Source:** Own Compilation (2026)

### 3.4.3 Data collection

The data were collected through semi-structured individual interviews, which were considered the most appropriate method to investigate the lived experiences of Social Sciences teachers on the integration of ICT tools in their teaching pedagogies. Semi-structured interviews provided sufficient flexibility for participants to articulate their experiences and for the researcher to probe, seek clarification and explore issues that emerged during the interview process (Creswell & Poth, 2018:163). The approach was fitting for the present study as it permitted participants to articulate their perceptions, experiences and contextual realities in their own words without the constraint of predefined response categories.

Following approval from the University and permission from the Gauteng Department of Education and the participating schools, eligible participants were approached individually and invited to participate voluntarily in the study. Those who agreed to participate received a Participant Information Sheet (Appendix D) explaining the purpose of the study, the research procedures, potential risks and benefits, and their rights as participants. Written Informed Consent (Appendix E) was obtained before any interviews commenced. Interview dates and times were arranged in consultation with participants to minimise disruption to teaching responsibilities, and interviews

were conducted in quiet venues within the participating schools to ensure privacy and confidentiality.

Each interview followed the semi-structured Interview Schedule (Appendix F) and lasted approximately 45-60 minutes, depending on the depth of participants' responses. Interviews were audio-recorded (with the permission of the participants) to ensure that the participants' responses were captured accurately. The researcher also made field notes during the interview process to record contextual observations, non-verbal communication and spontaneous reflections, which proved useful in the analysis of the data. All recordings were transcribed verbatim and checked against the original recording after each interview. The recordings were kept in secure, password-protected electronic files to which only the researcher had access.

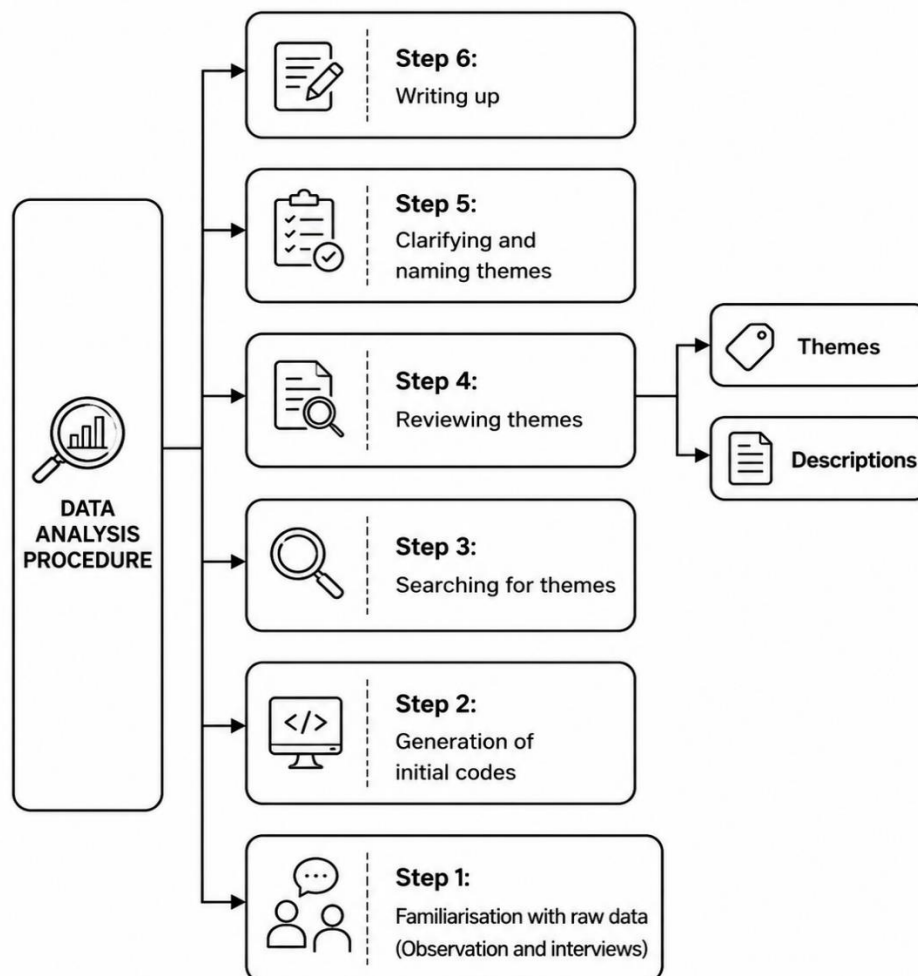
The semi-structured interview process created a situation where participants felt comfortable sharing their experiences authentically and, in some depth, from the researcher's perspective. The flexibility of the interview format allowed for the exploration of issues that were not always anticipated when developing the interview guide, thus generating richer and more meaningful insights into the opportunities, challenges and contextual realities influencing the integration of ICT within Social Sciences classrooms. This process enhanced both the depth and authenticity of the qualitative data collected, whilst remaining consistent with the interpretivist paradigm and phenomenological research design adopted for the study.

Appendices A-F provide the complete interview protocol, participant information sheet, informed consent documentation, ethics clearance certificate and institutional permission letters to provide a transparent audit trail of the data collection process.

#### **3.4.4 Data analysis**

Alem (2020:2) describes data analysis as a process of converting collected raw data into meaningful facts and ideas that can be communicated qualitatively or quantitatively. The qualitative data generated through the semi-structured interviews were analysed using thematic analysis. This approach provided a systematic yet flexible method for identifying, organising, and interpreting patterns of meaning emerging from participants' narratives (Braun & Clarke, 2021:329). The purpose of the study was not to summarise participants' responses but to understand the meanings they attached to their experiences of integrating ICT tools into Social Sciences

teaching. The approach aligned with the interpretivist research paradigm and the phenomenological research design, both of which seek to understand participants' lived experiences within their natural educational contexts. Qualitative researchers employ thematic data analysis to systematically organise and analyse complex datasets (Dawadi, 2020:63). The steps for thematic data analysis are discussed in Figure 3 below.



**Source:** Own Compilation (2026)

**Figure 3.** Data analysis process - 6 steps thematic analysis

#### Step 1: Familiarisation with raw data

This involved using the interview transcripts of the teachers (raw data) to understand teachers' ICT experiences. The researcher read the raw data numerous times to warrant that he understood the dataset properly (Braun, Clake & Weate, 2016:215).

## Step 2: Generation of initial codes

The researcher grouped data into relevant categories for further analysis. Meaning the data was organised so that it can be compared, and to ensure that the differences and similarities from the data set are identified. At this stage, the data was transcribed into text within a Word document. The researcher used letters as a method of identifying the research participants, for example, C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12 represents 12 Social Sciences teachers, and DH1, DH2, DH3 represents Social Sciences Departmental Heads. This was done to keep the identity of the participants confidential.

## Step 3: Searching for themes

The researcher read through the entire available data. In this step, the idea was to get an overall understanding of its content. By carefully reading the available data several times, the research was able to capture common ideas, visible patterns, and challenges that were recurring from the responses of the research participants.

## Step 4: Reviewing themes

According to Williams and Moser (2019:46), coding is the process of sorting data into categories before assigning meaning to it. In this study, codes and themes were carefully reviewed by the researcher to ensure that participants' responses and lived experiences were accurately captured. This involved the grouping of ideas and patterns that are similar, while putting aside unrelated information. This process ensured that research questions were addressed by identifying and establishing meaningful themes.

## Step 5: Clarifying and naming themes

This step involved the articulation of what each theme captures and its importance in the context of the study. At this stage, the researcher embarked on the process of refining the themes to ensure that they correctly echoed the meanings and patterns that are found in the information.

## Step 6: Writing up

The researcher provided a deeper, more detailed interpretation of the emerging themes, sustained by evidence from the data gathered. Moreover, the researcher

embarked on integrating the themes into a cohesive argument that represents the participants' views.

Interpretation of the identified themes was further guided by the Technology Acceptance Model (TAM). The model provided the theoretical lens through which the participants' perceptions regarding the usefulness, ease of use and adoption of ICT tools were understood. The integration of empirical findings with the theoretical framework enhanced the interpretation of the results. This was to ensure that the discussion was anchored in both participants' lived experiences and the existing body of scholarly literature.

### **3.5. Trustworthiness**

According to Stahl and King (2020:26), qualitative research does not adhere to the quantitative idea of validity. However, qualitative researchers strive for the less obvious goal of credibility, which indicates that when readers understand the written material, they trust the results of the study (Surucu & Maslakci, 2020:2695). The 4 components of trustworthiness in qualitative research are credibility, dependability, transferability, and confirmability, although readers should not expect precise results.

#### **3.5.1 Credibility**

Credibility is the extent to which the study's findings are reliable and can be accepted as a true reflection of the participants' lived experiences. As noted by Babbie and Mouton (2013:55), the study is considered credible when its findings are reliable, grounded in acceptable evidence, and credible. In research on Social Sciences teachers' experiences of integrating ICT tools into their pedagogies in Tshwane West District, the researcher ensured credibility by adhering to conventional research principles and ethical processes. The adoption of semi-structured interviews and qualitative data analysis helped to carefully produce the findings of the study. This method provides high confidence that the findings represent the lived experiences of the participants in this study.

From the researcher's perspective, credibility depended on ensuring that participants' voices remained at the centre of the research process. Allowing participants sufficient time to explain their experiences and checking interview transcripts reduced the possibility of misinterpretation. This was to ensure that the findings reflected the

realities of ICT integration within their schools rather than the researcher's assumptions.

### **3.5.2 Dependability**

Dependability is the extent to which the researcher can compare the study's results with similar results in context (Surucu *et al.*, 2020:2695). Creswell (2013:31) maintains that dependability refers to how consistent and reliable research findings are over time, meaning that the study can be repeated and still produce similar outputs. In well-conducted research, auditing should be carried out in an unbiased manner so that other scholars can easily use the study at their institutions. When participants provide similar responses to the questions, this indicates that the study has achieved a good level of consistency and dependability in its findings. In this regard, it would mean that other researchers conducting research on the same topic in the future (Babbie & Mouton, 2013: 83) could use the findings of this study.

In the present study, dependability was enhanced by applying the same interview procedures to all participants, using a common semi-structured interview guide, maintaining detailed field notes, and documenting each stage of the analysis through thematic analysis. All methodological decisions were recorded to ensure that the research process remained transparent and open to examination by other researchers. The researcher maintained consistency throughout the investigation to enhance the reliability of the study and ensure that each participant had an equal opportunity to contribute meaningfully.

### **3.5.3 Transferability**

Megheirkouni and Moir (2023:849) state that in qualitative research, the concept of transferability entails how applicable the findings of the study can be in a different location, context, or nation. The transferability will be attained if other institutions can draw from the results of the study and apply them meaningfully in their own context in future.

Although the study concentrated on public primary schools in Tshwane West District, it included detailed descriptions of the research setting, participant characteristics, sampling methods, and research procedures. This information enabled readers to assess the applicability of the findings to similar educational environments. For the researcher, offering thorough contextual details was crucial because qualitative

research aims not for statistical generalisation but for drawing readers to judge whether the findings can inform similar educational environments facing comparable ICT integration challenges.

### **3.5.4 Confirmability**

Confirmability is the degree to which the research findings are a product of the participants' experiences rather than the researcher's own beliefs, assumptions or preferences (Lincoln & Guba, 1985:318). Confirmability was enhanced in this study through the use of a clear audit trail throughout the research process, the retention of interview transcripts in verbatim form and the recording of coding decisions. This process ensured that the themes identified were directly attributable to the participants' narratives. The interpretation of the findings was further supported through continuous comparison with the TAM and the existing body of literature to minimise subjective interpretation. The researcher maintained confirmability by being mindful of self throughout the research process to ensure that the interpretation of the findings aligned with the participants' experiences rather than the researcher's expectations regarding the integration of ICT.

### **3.6. Ethical considerations**

In qualitative research, the researcher must consider ethical issues. Ethics were considered because professional teachers and formal institutions, such as schools, were part of the research. All participants were given consent forms before the start of the interview sessions. Ethical principles and professional standards are two essential ingredients for ensuring that the researcher conducts the research responsibly and with integrity (Surucu *et al.*, 2020:2697).

#### **3.6.1 Ethical Approval**

Ethical approval was obtained from the University of South Africa (UNISA) College of Education Research Ethics Committee before any data collection activities commenced. The ethical clearance process ensured that the proposed study complied with institutional research ethics requirements relating to participant protection, scientific integrity, confidentiality, and responsible research conduct. Approval was granted after the research proposal, participant recruitment procedures, interview schedule, participant information sheet, informed consent documentation, and data management procedures had been reviewed and approved by the relevant ethics

structures. The researcher considered the process of seeking ethical clearance prior to accessing the research sites an important step to demonstrate institutional accountability and to ensure that all stages of the research adhered to accepted ethical norms. The Ethical Clearance Certificate is attached in Appendix A.

### **3.6.2 Institutional Permission**

Following ethical clearance, permission to conduct the study was obtained from the Gauteng Department of Education, subsequently from the principals of the participating public primary schools, before participants were approached. These approvals ensured that the study complied with provincial education regulations and that school management was informed regarding the purpose, scope, and procedures of the investigation. Institutional approval was regarded by the researcher as an important aspect of the study as it encouraged transparency, safeguarded the interests of the participating schools and ensured that the study was conducted within legitimate educational institutions. Copies of the provincial approval letter and school permission letters are attached as Appendices B and C.

### **3.6.3 Informed Consent**

Participation in the study was based entirely on informed consent. Before participating, each teacher received a Participant Information Sheet (Appendix D) explaining the purpose of the study, the nature of participation, interview procedures, potential risks and benefits, confidentiality measures, and participants' rights. Participants were given sufficient opportunity to ask questions before signing the Informed Consent Form (Appendix E). No participant was interviewed before written consent had been obtained. From the researcher's perspective, informed consent was not treated as a once-off administrative requirement but as an ongoing ethical process that ensured participants understood their involvement throughout the study.

### **3.6.4 Voluntary Participation**

Participation in the study was entirely voluntary. Teachers were invited to participate voluntarily and without any coercion, pressure, or inducement. Teachers' decision to participate or decline participation would have no effect on their professional duties. Participants were reminded that they could decline to answer any question they felt uncomfortable with. The voluntary nature of participation meant that the data collected

reflected participants' experiences and not responses affected by external pressure or obligation.

### **3.6.5 Confidentiality and Anonymity**

Every reasonable measure was implemented to protect participants' identities and maintain the confidentiality of the information they shared. Participants were assigned pseudonyms or participant codes during transcription and analysis, and no identifying information was included in the reporting of the findings. The identities of the participating schools were protected where necessary to minimise the possibility of indirect identification. Interview recordings, transcripts, and field notes were stored securely using password-protected electronic files accessible to the researcher and supervisor. From the researcher's perspective, maintaining confidentiality encouraged participants to speak openly and honestly about their experiences of ICT integration without fear of professional consequences.

### **3.6.6 Right to Withdraw**

Participants were informed that they could withdraw from the study at any time without giving reasons and without any negative consequences. They were also told that they could request the withdrawal of their interview data before data analysis started if they decided not to continue with participation. This reassurance supported participant's autonomy and protected their right to make independent decisions about continued participation in the research.

### **3.6.7 Data Management and Storage**

All research data were managed in accordance with the University's research ethics requirements. Digital recordings of interviews, transcripts, field notes, consent forms and associated documentation were securely stored using password-protected electronic devices and secure storage systems only accessible to the researcher and supervisor. Hard copy documentation was stored in a locked cabinet for the prescribed institutional retention period, after which it will be destroyed in accordance with the University's records management policy. Throughout the investigation, the researcher kept detailed records in an effort to maintain transparency and accountability and to follow the ethical standards of the institution.

### **3.7 Limitations of the study**

Cohen *et al.* (2017:248) define limitations as anything that threatens the validity of a study. Although the study was conducted in line with accepted principles of qualitative research, some methodological and contextual limitations should be recognised when interpreting the findings. First, the study was limited to 3 public primary schools in the Tshwane West District of Gauteng Province, meaning that the findings are reflective of the experiences of the Social Sciences teachers working in this specific educational context. The findings should not be taken to be representative of all public primary schools and/or all provinces in South Africa. Instead, they offer rich contextual insights into ICT integration in the participating schools.

Secondly, the study was conducted with Social Sciences teachers, and HoDs, who may also influence the successful integration of ICT within schools, were not included. These other stakeholders may have provided broader institutional perspectives on ICT implementation and support.

Thirdly, the study employed a qualitative phenomenological research design that was descriptive and prioritised depth of understanding over breadth of coverage. As a result, the relatively small number of purposively selected participants was appropriate for obtaining rich descriptions of lived experiences but was not intended to produce generalisable findings. Instead, the value of the study lies in the depth, authenticity, and contextual richness of the participants' responses.

The researcher was aware of these limitations at the beginning of the study and considered them acceptable. The main purpose of the study was to understand the lived experiences of Social Sciences teachers, not to determine the prevalence of ICT integration in the broader education system. The researcher was able to keep a focused group of participants and a well-defined research setting. This helped to understand the phenomenon in depth and maintain the contextual integrity of the findings. However, the study offers important insights into the opportunities, challenges and contextual factors that influenced the integration of ICT in public primary schools. This broadens the existing knowledge base and offers a platform for future research with larger numbers of participants and different educational environments.

### **3.8 Summary of the chapter**

This chapter presented and justified the research methodology adopted to investigate Social Sciences teachers' experiences of integrating ICT tools into their teaching pedagogies within public primary schools in the Tshwane West District of Gauteng Province. The discussion revealed the appropriateness of the interpretivist paradigm, qualitative research approach and phenomenological research design to address the research problem and achieve the objectives of the study. The chapter explained and justified the research setting, study population, purposive sampling strategy, data collection procedures, and thematic analysis process used to generate and interpret the empirical data. Measures implemented to enhance the trustworthiness of the study, together with the ethical principles that guided the investigation and the limitations of the study. This was also discussed to demonstrate the methodological rigour, transparency, and integrity of the research process.

From the researcher's perspective, all methodological decisions were made to keep the study aligned with its goal of capturing the lived experiences of Social Sciences teachers. This approach aimed to produce findings that are credible, reliable and meaningful within the context. These decisions created a clear and defensible framework for examining the phenomenon and ensured that the empirical results in the next chapter are well-grounded in participants' experiences and supported by a transparent research process.

The next chapter presents the findings obtained from the semi-structured interviews conducted with the participating Social Sciences teachers. The findings are organised according to the themes and sub-themes that emerged from the thematic analysis and are interpreted in relation to the TAM, the existing body of literature, and the objectives of the study.

## **CHAPTER 4: DATA PRESENTATION, ANALYSIS, AND DISCUSSION**

### **4.1 Introduction**

Chapter 3 presented and justified the research methodology adopted for this study. It included the research paradigm, qualitative research approach, phenomenological research design, participant selection procedures, data collection methods, thematic analysis process, trustworthiness, ethical considerations, and the limitations of the study. Building on this methodological foundation, the present chapter focuses on the presentation and analysis of the empirical findings. These findings were generated from semi-structured interviews conducted with participating Social Sciences teachers and HoDs at the 3 public primary schools in the Tshwane West District of Gauteng Province.

The findings are presented according to the themes and sub-themes that emerged through the thematic analysis of the interview data. Each theme is presented with direct evidence from the narratives of participants and interpreted according to the research questions, the objectives of the study and the Technology Acceptance Model (TAM). This served as the theoretical lens to understand participants' experiences of integrating Information and Communication Technology (ICT) into their teaching pedagogies. To enhance the credibility and transparency of the findings, participants are identified by participant codes rather than their actual names. This is to maintain confidentiality and at the same time allow the reader to follow the presentation of the data.

The thematic presentation of findings from the researcher's point of view allowed for the logical and meaningful organisation of participants' experiences while still maintaining the richness and authenticity of their narratives. This approach allowed for similarities, differences and recurring patterns across participants' experiences to emerge. This approach gave an in-depth understanding of the opportunities, challenges and contextual realities that influence ICT integration in Social Sciences classrooms.

### **4.2 Research process**

As discussed in Chapter 3, the study was conducted within an interpretivist research paradigm, using a qualitative phenomenological design and a descriptive approach.

Ethical clearance was obtained from the University of South Africa, while permission to conduct the study was granted by the Gauteng Department of Education and the participating public primary schools before data collection commenced. Semi-structured interviews were conducted with Social Sciences teachers and HoDs who met the inclusion criteria, and the data were analysed using thematic analysis. The detailed methodological procedures, participant recruitment process, trustworthiness measures, and ethical considerations are presented in Chapter 3. The remainder of this chapter therefore focuses on presenting and analysing the empirical findings that emerged from the participants' narratives.

### **4.3 The characteristics of the participants**

The participants were selected from three primary schools in Tshwane West District in Gauteng Province, South Africa. They comprised three Social Sciences departmental heads and 12 Social Sciences teachers. These participants were selected for their experience integrating ICT into Social Sciences teaching in primary schools. Because of their experiences, the participants provided rich data.

### **4.4 The profile of the participants**

The participants sampled for this study are profiled in the three tables below (4, 5, and 6), presenting information on their characteristics from three primary schools in the Tshwane West District in Gauteng, South Africa. The participants in the study were characterised by a mixed gender composition, with more females than males, as shown in the tables below.

This section presents the characteristics of the 15 participants who took part in individual, face-to-face, semi-structured interviews at three primary schools (Schools A, B, and C) in the Tshwane West District in Gauteng Province, South Africa. Understanding factors such as age, gender, experience, and occupational status of the study participants was crucial because these factors influence ICT integration. Social Sciences department heads and teachers were included in this study, reflecting their differing levels of experience. Notably, male Social Sciences teachers were underrepresented in the study compared with female teachers, a trend consistent with national and international literature indicating that the teaching profession has more female than male teachers (Davids & Waghid, 2020:3).

Furthermore, this study took into consideration differences in years of experience of participants in the teaching profession, as those with long service tended to have better and deeper pedagogical content knowledge as compared to novice teachers who are more enthusiastic in terms of technology (Florida & Mbato, 2020:9). These dynamics played a critical role in interpreting the findings of this study.

Before presenting the data in Table 4, it is important to note that School A had 4 Social Sciences teachers and 1 departmental head, for a total of 5 participants. The ages ranged from 26 to 54 years, with a high proportion of females (four females and one male). This demonstrates the trend in South Africa: primary schools tend to have more female than male teachers. This is supported by Hlatshwayo (2024:41), who states that the teaching profession is highly feminised. The number of years of experience ranged from 3 to 15 years, allowing the study to capture multiple perspectives among participants and ensuring that the data were rich and saturated.

**Table 4.** The profile of participants of School A

| Participants | Age | Gender | Occupation Status | Experience in Years |
|--------------|-----|--------|-------------------|---------------------|
| DH 1         | 54  | Female | Departmental Head | 15                  |
| C 1          | 32  | Male   | Teacher           | 5                   |
| C 2          | 26  | Female | Teacher           | 3                   |
| C 3          | 36  | Female | Teacher           | 8                   |
| C 4          | 32  | Female | Teacher           | 6                   |

**Source:** Own Compilation (2026)

School B in Table 5 comprised 4 Social Sciences teachers, including the departmental head. The 5 participants profiled in the school were between 30 and 56 years old. Similar to School A, School B had more female representatives (3 females and 2 males), highlighting the gender imbalances and the gender trend in the teaching profession. The participants at this school had between 4 and 14 years of teaching experience, suggesting that they had a range of classroom experience in teaching Social Sciences. Research shows that teachers with longer professional experience are often better positioned to implement the curriculum (Graham *et al.*, 2020:752), which helped the researcher contextualise the subsequent findings on the incorporation of technological tools in Social Sciences classrooms.

**Table 5.** The profile of participants of School B

| Participants | Age | Gender | Occupation Status | Experience in Years |
|--------------|-----|--------|-------------------|---------------------|
| DH 2         | 56  | Female | Departmental Head | 14                  |
| C 5          | 35  | Male   | Teacher           | 7                   |
| C 6          | 30  | Female | Teacher           | 4                   |
| C 7          | 33  | Female | Teacher           | 5                   |
| C 8          | 51  | Male   | Teacher           | 12                  |

Source: Own Compilation (2026)

School C in Table 6 consisted of 5 participants, 4 Social Sciences teachers and 1 departmental head. The school had the highest female representation among all schools in this study, with 4 females and 1 male. This strengthens the gender trend in primary schools and the teaching profession in general. The participants were between 28 and 54 years old. The participants in this school had between 6 and 15 years of experience, with C9 the most experienced at 15 years, making her the most experienced across all 3 primary schools. The experiences of young and older teachers in this study provided a rich variation in teacher attitudes toward adopting ICT tools, consistent with the literature proposing that age differences can determine ICT integration preferences (Fazi, Zaniboni & Wang, 2025:139).

**Table 6.** The profile of participants of School C

| Participants | Age | Gender | Occupation Status | Experience in Years |
|--------------|-----|--------|-------------------|---------------------|
| DH 3         | 54  | Female | Departmental Head | 14                  |
| C 9          | 52  | Female | Teacher           | 15                  |
| C 10         | 37  | Female | Teacher           | 8                   |
| C 11         | 28  | Female | Teacher           | 4                   |
| C 12         | 33  | Male   | Teacher           | 6                   |

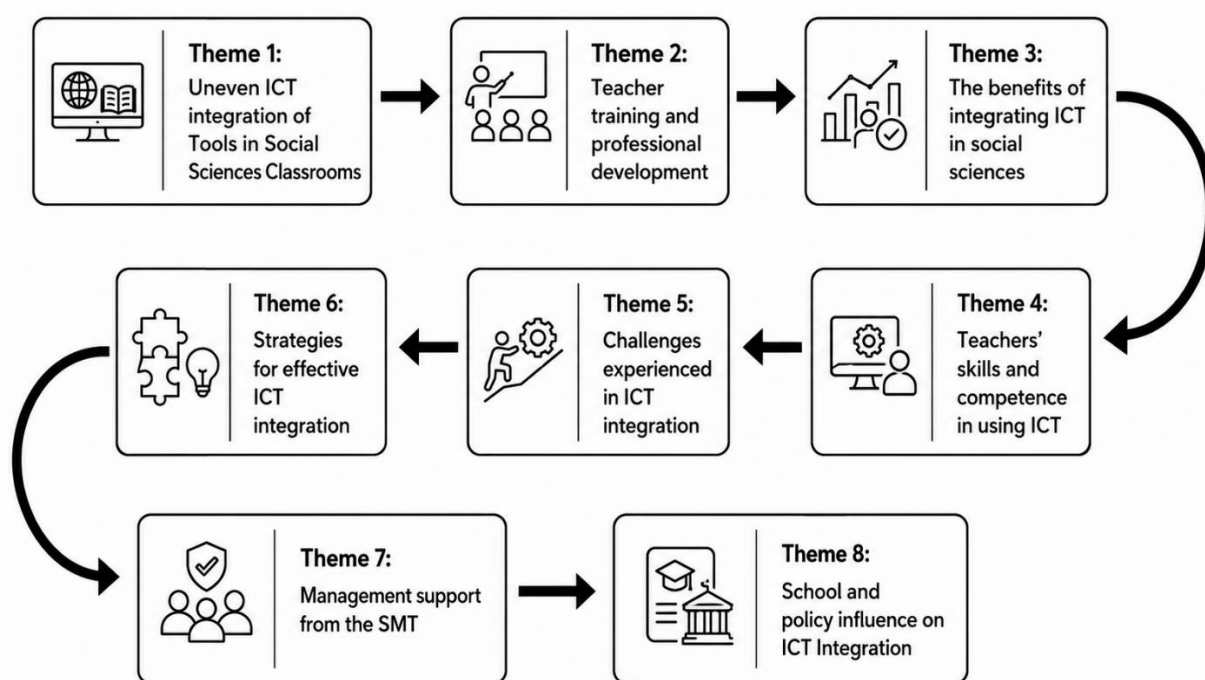
Source: Own Compilation (2026)

#### 4.5 Data presentation and discussion

The data were transcribed verbatim after listening to the recording multiple times. The following data were presented under the themes that emerged from a critical examination and analysis of the interview transcripts. Braun *et al.* (2016:215) work guided the presentation and discussion of this study's findings. McMillan and Schumacher (2014:368) maintain that thematic analysis plays a crucial role in critically

examining the lived experiences and perspectives of various research informants, identifying patterns of similarity and difference, and revealing unexpected insights that may emerge from the data.

Figure 4. below summarises the themes that emerged from the primary data. An analysis of these themes follows the graphical presentation below.



Source: Own Compilation (2026)

**Figure 4.** Themes extracted from the primary data

#### 4.5.1 Theme 1: Uneven Integration of ICT tools in Social Sciences classrooms

Participants explained the uneven ICT integration with the following statements:

Participant C1 from School A.

*"I usually use the smart boards in the classroom to write notes and activities for the learners. However, other classes do not have smart boards."*

The participant's response suggests that integrating ICT tools is perceived as effective for presenting Social Sciences lessons, thereby reflecting the concept of perceived usefulness in the Technology Acceptance Model [TAM] (Davis, 1989:321). This echoes recent studies, which show that teachers are likely to accept technology when they believe that technological tools help them enhance their teaching, stimulate

learner engagement, and improve overall subject results (Ching & Jamaludin, 2025:565). Mnisi, Mtshali, and Moses (2024:129) maintain that the application of ICT in the classroom is critical for both teachers and learners, as it improves their understanding of the concepts that are taught in their subjects. However, the participant's (C1) remark that other classrooms do not have smartboards points to challenges that are mostly related to school infrastructure, which leads to limitation of meaningful integration of ICT in classrooms. Despite recognising the benefits of technology in education, inadequate access to technological tools will impede teachers' development, confidence, and competence in using ICT.

Moreover, participants' responses further strengthened the uneven nature of ICT integration across the schools.

Participant C7 explained:

*"Unfortunately, we do not have enough ICT resources in our school, as most classes still need projectors or smartboards while very few uses projectors daily. Therefore, using ICT tools like laptops and smartboards is highly impossible, especially in a Social Sciences classroom. However, I mostly rely on my phone to show learners the videos. For example, when I do map scales, I take out my phone and show learners that this is the map scale topic we are going to talk about. Also, I show them pictures on my phone of volcanoes when teaching them about volcanoes, which helps them to understand."*

This response reinforces the theme of uneven integration of ICT tools, in which the participant is required to adapt to ICT by using a personal device to compensate for the institution's lack of resources. While this shows a willingness to integrate ICT, it also places a serious burden on the teacher and limits the scope of ICT adoption and use. In this regard, the response indicates that the incorporation and application of ICT are becoming more informal and inconsistent, which will also limit sustainable integration and effective learner engagement in the Social Sciences classroom.

Similarly, C6 from School B stated:

*"ICT tools are very limited resources in my school as projectors are mostly prioritised for grade 6 and 7 classes, so I have to use my own laptop in teaching social sciences, and I use my phone to check for topics and preparations of my lessons."*

This demonstrates how the shortage of resources in schools shapes teaching practice, forcing teachers to heavily depend on their own resources. Although this shows some use of ICT, it constrains opportunities for collaboration and interaction in education. The implication is not only that teaching methods are affected by unequal access to ICT tools, but also that learners are being disadvantaged in acquiring the necessary 21st-century ICT-related skills.

In the same vein, C8 noted:

*“We do not have resources, but I am using my own resources, like my phone and laptop. So, I do research on Google for my learners a day before and come to class to present the lesson using video clips and pictures.”*

This further demonstrates the unequal access to ICT tools in schools. While individual efforts are important in advancing ICT integration, the results of the implementation process will remain fragmented. The impact is that the integration of the ICT process will become an individual burden rather than an institutional issue, undermining consistency in curriculum delivery and long-term sustainable implementation of ICT.

Participant C9 from School C added:

*“I only use overhead projector when I am in grade 7 classroom; but when I am in grade 5 and 6 classes, I use whiteboard and charts to teach History and Geography.”*

This response shows that integration is not only unequal across schools but is also experienced within the same teacher's practice, as determined by the allocation of ICT tools within the school. The implication is that learners' access to technology-enabled learning varies significantly, creating a situation in which some learners have better learning experiences, thereby hindering effective ICT integration in Social Sciences classes.

This theme revealed a pattern of uneven integration of ICT tools in the teaching of Social Sciences, driven by uneven access to and distribution of ICT resources across schools and grades. While participants continued to show willingness to adopt ICT through their personal devices, smartboards, and projectors, integration remains inconsistent and depends on the availability of ICT tools. Consequently, the integration process is shaped more by individual teachers' willingness and drive to adopt and use ICT than by institutional support. The findings reveal infrastructural constraints that

hamper the uniform implementation of ICT. Overall, this theme highlights the need for fair distribution of ICT tools in schools to ensure the effective incorporation of technology in Social Sciences education.

#### **4.5.2 Theme 2: Teacher training and professional development**

Teacher training and professional development emerged as critical facilitators of the effective implementation of ICT tools in Social Sciences classrooms. The majority of participants reported limited training, which, in most cases, meant they had to rely on pre-service education or develop themselves to ensure they could integrate ICT tools in the Social Sciences classroom.

Participant C 2 explained:

*“I have learnt during my university days how to use computer. Therefore, so far I have not received any develop from school or the department; however, I am looking forward to be developed even further to allow me to be more effective teacher in the 21<sup>st</sup> century.”*

This highlights the lack of ongoing teacher development and capacity building at both the district and school levels. This proposes that there is a serious void in teacher upskilling. This lack of teacher training and development will lead to teachers feeling demotivated and to a reduction in their confidence in adopting and using ICT tools in their teaching pedagogies. This will affect long-term sustainable adoption of ICT in teaching and learning. In the context of the TAM, inadequate ICT training for teachers reduces PEOU (Davis, 1989:322). Lack of ICT-related training leads to teachers developing anxiety and reducing their self-confidence when using technological tools. On the contrary, the study by Tabassum (2025) found that teachers who receive continuous support and training, that related to their teaching context, are more likely to be effective and creative when adopting technology in their classrooms.

Participant C1 shared:

*“I received ICT related training during my university studies, specifically in computer skills.”*

This demonstrates that the participant has received foundational pre-service training, but it provides insufficient evidence that the participant has progressed beyond basic computer literacy skills. The participant’s computer skills may remain undeveloped

over time. When the participant does not receive a refresher course, the integration of long-term and sustainable ICT implementation may fail.

Similarly, participant C4 shared:

*“I have not received any support from school level; however, I apply what I was taught in university to integrate ICT tools in the teaching of Social Sciences.”*

This demonstrates a void in teacher training, as the participant had to rely on what was taught in university rather than on structured support at the district or school level. Teachers do adapt technology, however, within unsatisfactory skill boundaries. This led to poor-quality use of ICT tools in teaching and learning and a weakened development system at the school level.

This is supported by participant C3, who emphasised:

*“To be honest, when it has to do with ICT nothing. I have not received anything from the Department of Education. Teachers are not developed, they supposed to come knowing how to use computers and the interactive whiteboard.”*

This demonstrates a lack of observed support from the department. The response affirms that there is insufficient teacher development programmes and policy implementation from the employer to support teachers. The expectation that teachers should come knowing how to use technology increases pressure. This may result in teachers experiencing frustrations and rejecting the integration of ICT. The implication is that this will affect technology integration readiness.

Participant C6 stated:

*“No, I have not received training; hence, I use YouTube to learn how to use other technology-related applications, such as Google forms in the teaching of Social Sciences.”*

The participants response show that there is no teacher training initiatives taking place to develop teachers so that they can incorporate ICT effectively. This failure to provide teacher training has led the teacher to resort to platforms such as YouTube for self-directed learning. This strongly demonstrates a positive attitude and showing behaviour that is proactive, by ensuring that ICT is adopted successful even in the absence of institutional support. This confirms that there is a willingness and a positive

attitude amongst teachers to integrate ICT tools such as Google Forms; however, they are subjected to acquiring the necessary skills independently. However, this type of self-initiated training may lack proper structure, exhibit serious inconsistencies, and be poorly aligned with Social Sciences pedagogy. The implication here is that while this self-directed training can help bridge the necessary skill gaps, it can also lead to unsystematic and uneven incorporation of ICT in Social Sciences classroom.

Furthermore, this is a strong indicator that although teachers had received introductory ICT training as students during their university years, their exposure to ICT tools now is outdated and limited. Insufficient professional training, support, and development faced by teachers has weakened ICT incorporation in Social education. Moreover, from a policy viewpoint, these findings reveal a partial realisation of the goals defined in the South African National e-Education Policy (DoE, 2004), which sees ICT as an important part of education across all subjects.

However, a few participants (C9, C10, and C12) offered opposing perspectives, stating that the training they received from the school and the district provided them with valuable support.

Participant C12 provided a comprehensive account:

*“In terms of professional development initiatives, I would say I attend many workshops. Therefore, most of the workshops were school-based. When I got to the school, I received training on how to use the smart board, how effective they can be, how to load our textbook, how to search and retrieve information. So we receive a school -based workshop, we also get workshop from the district, so that is the development that we get. They capacitate us first on how to use the physical object, which is a smart board. Then going into the software as well, what to do when it has blocked, how to block some information, since well, there is internet connectivity and you know how learners can be very inquisitive. Therefore, we know how to block certain information that learners are not supposed to get. So yeah, that is the capacitation from the school days.”*

Participant C10 affirmed similar experiences, remarking that: *“I went for the ICT training, which was offered by the department where they took most of us at school because our school is an ICT school. At school level, I have only received training from teachers who are advanced with ICT.”*

Such conflicting experiences points to uneven ICT integration in professional teacher training and development across all schools in the district. While other schools continue to demonstrate adequate departmental and management support, some operate in professional isolation, leaving teachers to rely on self-development initiatives. UNESCO (2023) found that a lack of proper ICT training and development amongst teachers can serve as a serious hurdle towards the implementation of ICT in teaching. Rosales (2021:2) maintains that effective integration of ICT remains possible only when teachers receive professional development.

For the same reason, C9 shared that:

*“The Department of Education used to give us the workshops. Like this year, during the June holidays, we went to the Thuto-Thebe (teacher centre) for workshops about using this integration of ICT in a classroom. In addition, we have teachers under the ICT committee; they workshop teachers with challenges to ICT integration.”*

This evidence from the response revealed an emerging culture of Professional Learning Communities (PLCs) in some schools, where teachers with knowledge of ICT integration educate those who are struggling. Chimbunde, Mbanjwa, and Moreeng (2024:136) support such collaborative approaches, stating that PLCs are effective ways of improving the teaching of History, learner academic achievement, and helping teachers to respond to the needs of the 21<sup>st</sup> century.

The presented data show many views: one on leadership and adaptability among teachers with a strong will to integrate ICT, and another on lack of institutional support, which create unequal access to ICT tools. This unevenness can have negative implications, such as the materialisation of the main objectives of ICT policy, the quality of teaching in Social Sciences education, and, most importantly, it lowers teachers' confidence.

The evidence suggests that, thematically, ICT policy and classroom application remain disengaged. This creates a gap that weakens the 21<sup>st</sup> century teaching transformation agenda in the South African classroom. As observed by Mathebula *et al.* (2025:57) continuous teacher training and development are important for effective and sustainable incorporation of ICT in education. Similarly, Tabassum (2025) found that teachers who engage in ongoing, contextually relevant training and development are

more likely to be effective and creative when adopting technology in education. This necessitates policy coherence at both the district and school levels. Therefore, this study proposes a strong need for ongoing, contextually relevant ICT training in the teaching of Social Sciences in South African classrooms. Without it, Social Sciences teachers will continue to operate with outdated technological knowledge and weakened support structures, breeding inequities across South African schools. Through the lens of the TAM by Davis (1989:319), a lack of training weakens perceived ease of use, resulting in teachers failing to see the full pedagogical value that ICT can have in modern education. This observation aligns with Murithi and Yoo's (2021:3) finding that insufficient training limits teachers from integrating ICT into the curriculum.

#### **4.5.3 Theme 3: The benefits of integrating ICT in the Social Sciences**

The researcher posed the following question: *“What are the benefits of using ICT tools in teaching Social Sciences?”* The intention was to capture the lived experiences of Social Sciences teachers regarding the value of ICT integration in their pedagogies. Participants shared their personal views on the benefits of ICT-supported teaching, showing a common understanding that ICT is not just an additional resource but also a pedagogical catalyst that can transform the educational landscape.

Data revealed strong agreement among participants that integrating ICT can lead to higher learner engagement in the classroom, deeper conceptual understanding, and better subject instruction delivery. Participants constantly shared that ICT-supported teaching and learning can transform learners into the protagonists of their own learning. For example, participant C8 stated:

*“ICT has benefits; remember learners of today are using gadgets. Therefore, they listen and participate more. You will not hear any noise coming from them. They keep quiet, even the naughty ones. In addition, when one uses a projector, learners get motivated to even write their work as they are all born at the right time using gadgets.”*

The participant's remarks highlight the perceived benefits of ICT in the classroom, such as improving learners' discipline and involvement. The integration of technological tools such as projectors is viewed as helping learners pay attention and engage during contact time, as learners are mostly familiar with these technologies, which form part of their daily lives. This means that ICT aligns well

with learners' learning interests and current lived experiences, making learning more engaging and interesting. The remark that even disruptive learners can be disciplined during the lesson suggests that ICT can foster a more focused environment by positively influencing learners' behaviour. Moreover, the participants drew a strong link between a technology-supported classroom and improved learner effort, as learners are more encouraged in such an environment. The incorporation of ICT is perceived as improving effective teaching and positive learner engagement.

In addition, participant C1 stressed:

*“Technology in the classroom really helps learners to enjoy the subject and makes teaching and learning far easier and interesting, as learners can see pictures and videos of what they learn in Social Sciences.”*

Participants perceive the integration of technology as providing high-quality lessons, leading to an improved experience in the teaching of Social Sciences. The integration of pictures and videos moves learning from the abstract concepts to the concrete concepts and ensures that learning remains easier for learners. This reveals a change from traditional text-based teaching method to a more engaging, learner-centred approach. As a result, ICT can help learners to improve their academic performance.

Furthermore, beyond classroom interaction, participant C5 highlighted that ICT supports the visualisation of content that is complex, especially when teaching historical and geographical topics, such as map-related concepts.

Participant C5 pointed out that:

*“We using projectors in a lesson, which helps visual learners to see what is taught which is much better than teaching through the chalkboard and you can reach more learners.”*

The finding demonstrates the role-played by ICT in accommodating learners' diverse learning styles through the use of multimedia in the classroom. The integration of videos, images, simulations, and virtual maps allows teachers to simplify abstract concepts and make learning more fun, realistic, and relatable (Chattopadhyay, 2025:1).

Another benefit of integrating ICT into education that participants have repeatedly cited is improved understanding of subject-related concepts and knowledge.

Participant C10 vowed that ICT is valuable:

*“ICT is beneficial to all learners, as we know that learners are not the same; therefore, as a teacher, I can accommodate them all, and in most cases, learners can remember what they were taught in class.”*

The response proposes that ICT is perceived as a tool that embraces inclusivity in the classroom context, and it is flexible in accommodating the diverse academic needs of learners. The views held by the participant further entail that technology makes learning more accessible, meaningful, engaging and allows teachers to adopt teaching methods that permit them to address the element of differentiation in the classroom. As noted by Spyropoulou *et al.* (2025:2), differentiated instruction involves adopting well-aligned teaching methods that support individualised learning by fostering an open environment that promotes effective teaching and the use of technology. Studies by Gheyssens *et al.* (2022:1384) and Pozas *et al.* (2020:824) reveal that technology enables learners to remain motivated and manage their learning effectively. Thereby making teaching more adaptive to individualised learning. The participant’s response aligns with the literature, which maintains that ICT supports inclusive education and promotes a learner-centred approach.

According to participant C11:

*“I think the benefits are that the learners can implement the knowledge that they have learned. If you teach them something, they are able to remember it, unlike just using a textbook method. When you teach them with textbook and chalkboard, it is not the same as when they are using ICT tools like overhead projectors. They can visualise, and able to remember everything that you have taught them.”*

This response reveals that the multimodal teaching approach can enhance cognitive benefits when fused with auditory, text-based and visual stimuli, thereby promoting longer-term knowledge retention and conceptual understanding of the subject matter.

Participants C3 verbalised that the integration of ICT supports individualised learning experiences, stating:

*“ICT makes it easier when it comes to differentiation because we have learners with various experiences and learning barriers. So, if you are using ICT, it is easier to show learners what they are learning and give them activities, because it makes it easier to also plan for individual learning, also it makes information to be accessible far much easier.”*

It was evident from this participant’s response that learners’ learning abilities differ significantly, and ICT permits teachers to deliver a personalised lesson specially tailored for individual learning experiences and give extra support where required (Murthy *et al.*, 2025:74). Furthermore, ICT was seen as giving access to teachers on updated and diversified information, replacing outdated textbooks.

Participant C12 remarked:

*“ICT has helped me to have access to numerous teaching resources; it also allows one to be flexible by using multiple online textbooks that are written by different authors and help to boost learner performance.”*

This remark by the participant shows how ICT expands Social Sciences teachers’ pedagogical resources and flexibility in the classroom by allowing them to reference various digital textbooks; it also assists in enhancing learner academic performance. Similarly, Das and Middya (2025:62) state that ICT is a powerful tool for improving learner academic performance.

Participant C2 supports the observation, stating that:

*“Using ICT in my class has helped me to improve the results of the Social Sciences. For example, the schools that use ICT always perform better than those without ICT resources. Technology also helps us to prepare our learners for future technology driven jobs. It is for this reason that I think it is important to use ICT in Social Sciences classroom.”*

From the above assertion by the participant, it is evident that technology can serve as a transformative tool that has the power to improve the academic performance of learners and develop their needed 21<sup>st</sup> century skills, such as collaboration, digital skills and communication (Ajitha & Vakkil, 2025:163).

In line with Davis's (1989:319) Technology Acceptance Model (TAM), these findings highlight Perceived Usefulness (PU), as participants perceived ICT as an effective tool for improving the teaching of Social Sciences. Social Sciences teachers continued to report that integrating ICT tools into their pedagogies made teaching much easier, improved learner outcomes, enhanced subject delivery, and created an efficient classroom environment. Because teachers perceive ICT as useful, they show positive attitudes towards its daily adoption into their teaching pedagogies. On the contrary, the findings by Nxusa et al. (2025:138) revealed that although perceived usefulness is important, there are other contextual factors on which ICT integration depends, such as infrastructure, internet connectivity, and technical support. This implies that Social Sciences teachers' positive attitudes alone cannot drive the integration of ICT tools without the abovementioned supportive conditions. The findings propose the following implications: (i) the integration of ICT tools in Social Sciences classrooms serves as a transformative pedagogical tool, allowing learner participation, promoting inclusivity, and a learner-centred approach. (ii) The policy and development initiatives should place greater emphasis on ensuring adequate infrastructure and technical support for teachers. (iii) ICT integration enhances future-ready learning by developing the skills and abilities that go beyond curriculum objectives.

#### **4.5.4. Theme 4: Teachers' skills and competence in using ICT**

The researcher posed the following question during the semi-structured interviews to capture Social Sciences teachers varied levels of confidence and competence in using ICT tools in their teaching pedagogies, extending from high proficiency to partial confidence and to uncertainty: *"How confident are you in using ICT tools to teach Social Sciences?"*

Drawing on Davis (1989:321), teachers' technological competence has a direct impact on their perceived ease of use (PE) and perceived usefulness (PU), which ultimately determine their behaviour towards adopting digital tools in their classrooms. Competence, therefore, can be a key factor supporting ICT integration in the teaching of Social Sciences (Effiong & Tom, 2025:16).

Various participants demonstrated strong confidence and advanced competence in using a range of ICT tools during Social Sciences lessons. One participant from C1 asserts that:

*“I am advanced in using computers and laptops and this makes me highly confident.”*

While another from C5 remarked that:

*“I think I am confident as I have proper knowledge of ICT applications and I can integrate them in a lesson.”*

These statements support what Mishra and Koehler (2006:1018) emphasise in their Technological Pedagogical Knowledge (TPK) model: that it is important not only to know the tool but also how to integrate it. Teachers possessing such confidence in using ICT tools can enhance learner engagement, as remarked by participant C6, who teaches the apartheid lessons using videos:

*“I am more confident because even before coming here I was assisting in other schools where they have ICT tools. Therefore, I can say I am more fluent with using ICT tools, as I said, they are quicker. Technology is helping us a lot hence I said, sometimes after teaching a topic, you can play a video. For example, teaching about apartheid, you can play the video so that learners can see visually what was happening. This makes it easier for learners to understand the content.”*

This response strengthens the constructivist and experiential approach, shifting the focus from teacher-centred to learner-centred learning (Magidanga *et al.*, 2025:107). Markina and Garcia Mollá (2022:3) found that learner-centred approaches enhanced learners' active participation in the classroom as compared to the teacher-centred approach.

Some participants show emerging competencies. They can integrate ICT tools, but they still need support. Participant C8 remarked that:

*“I can say I am confident, though not that much, as I am still learning how to use other tools. Nevertheless, I can operate the laptop, and I always have to ask for help when it comes to connecting the laptop and the projector.”*

The participant's remarks propose that, ICT skills that the user has are at foundational level. This is demonstrated by the struggle to use ICT in the classroom, as the participant still battles to connect the laptop with the projector. Such challenges can

affect lesson flow and make ICT integration difficult. The response therefore shows the need for continuous practical training to help teachers improve their ICT skills.

Participant C7 remarked that:

*“I would say my competence and confidence are at 50% in using ICT tools, because I rarely use ICT tools in my school due to lack of ICT tools in my class.”*

This statement suggests that the participant's competence and confidence are both moderate and most affected by a lack of technological resources at the school level. This lack of technological resources and exposure has continued to undermine the participant's full development of competence and mastery in integrating technological tools in the Social Sciences classroom. The theory of self-efficacy by Bandura (2013:17) supports this, stipulating that confidence can be enhanced through mastery and social persuasion.

Evidently, some participants stated that their confidence was enhanced through self-directed learning and peer support at a school level.

Participants C9 remarked that:

*“I am very confident because I have seen that I can use a computer and I have learnt by myself to develop those skills and the needed abilities.”*

Participant C10 stated that:

*“At the beginning, it was difficult to use technology, but with young teachers helping, it is far better than in the beginning because I know how to manoeuvre, how to do certain things, how to check certain things, how to download videos so learners can be able to see while teaching them.”*

These statements show that competence is not fixed; it can grow with experience and is largely situational. This implies that when teachers have access to and exposure to ICT tools and use them regularly, their competence develops. However, the above statements show that there is a serious gap in training and developing teachers to integrate digital tools without any challenges.

Participant C11 remarked: *“I am confident, but the problem is that we were not trained enough to implement ICT. This shows how faulty our education system is.”*

This demonstrates that many teachers enter the teaching profession without sufficient ICT preparation, a persistent issue in South Africa. Participants who had prior exposure at other schools reported enhanced confidence (C6), underscoring the crucial role of contextual affordability and improved infrastructure. Such schools make a significant contribution to the quality of teacher competence and development.

At the highest range, participant C12, with broad experience, remarked on profound confidence:

*“I think it has been years using ICT tools. Therefore, I think I am very much confident.”*

This statement affirms that the more and longer one is exposed to ICT, the better one becomes at integrating it and starts to view it positively as a tool that has the capacity to transform education. Current empirical research supports this relationship. The study by Murithi and Yoo (2021:2) found that teachers with sufficient confidence and competence in ICT were more likely to perceive technology as useful for delivering the curriculum, especially when teaching complex content. Aurangzeb, Kashan, and Rehman (2024:161) share this view, stating that teachers’ technological competence significantly influences PU and the adoption of ICT in the classroom, as teachers with strong confidence can align ICT with instructional goals. The overall data across all three schools shows a spectrum of digital competence.

**Table 7:** Participants’ distribution of ICT competence and confidence level

| Participants Proficiency Level    | Participants Explanatory Evidence |
|-----------------------------------|-----------------------------------|
| Great competence and confidence   | C1, C4, C5, C6, C11, C12          |
| Reasonable confidence with gaps   | C2, C7, C8, C10                   |
| Little confidence and uncertainty | C3, C6                            |

**Source:** Own Compilation (2026)

The patterns in the table above strongly suggest that confidence in the integration of ICT tools is directly correlated with access to ICT tools, prior exposure, and prior use. Participants with limited access to ICT tools and prior use demonstrate confidence uncertainty, proving that ICT integration depends not only on skill but also heavily on structural availability.

The findings in this theme demonstrate that participants with high confidence and competence in adopting ICT tools viewed these technologies as easy to use, manageable and useful in their instructional practices. According to TAM by Davis (1989:322), when users of a system hold a strong belief that it requires little effort to operate, they develop a positive attitude and willingness to integrate and use the system. In this study, participants who described themselves as “advanced” and “confident” in using ICT tools such as laptops, computers, and multimedia in their classrooms had fewer barriers to integration and therefore used these tools regularly. This strongly demonstrated perceived ease of use, which strongly influenced the use and adoption of actual technologies in the classroom. In the same vein, Aurangzeb *et al.* (2024:162) argue that PU and PEOU remain as vital factors of teachers’ approval of educational technologies. On the other hand, teachers who lacked competence in using technology remarked that they hesitated to integrate ICT into their classrooms, resorting instead to traditional teaching methods, as observed by Effiong and Tom (2025:17), who established a recurring pattern that limited ICT competence inhibited meaningful ICT incorporation in Social Sciences classrooms.

#### **4.5.5 Theme 5: Challenges experienced in ICT integration**

The participants emphasised significant challenges that deter the integration of ICT tools in the teaching of Social Sciences. The researcher explored the challenges faced by Social Sciences teachers in integrating ICT into their pedagogy by posing the following question: *“What challenges have you encountered while using ICT tools in the Social Sciences classroom?”* Systemic issues mainly drove these challenges and a lack of infrastructure, rather than by issues related to teachers. The participants explained that most of their classrooms lack ICT tools such as computers and interactive smartboards.

Participant C1 explained the extent of the scarcity of these ICT tools, stating that:

*“The challenges I have encountered is that most classes do not have smartboards so it becomes difficult to integrate ICT in social Sciences. It is either you have to make copies for learners before going to class or write on the board for me, which is sometimes, time consuming.”*

Others maintained that, even though ICT tools were available, they were inadequate to meet the needs of teachers and learners in the classroom. Participant C8 lamented:

*“The challenges I had were that we write on the same whiteboard, which we have to use when displaying videos with a projector. We have resources, but they are extremely limited. In addition, safety is a very serious issue in this township. We do not have Wi-Fi and it means I must use my own money to buy data. If we can have ICT resources, teaching and learning will be effective.”*

Additionally, due to the shortage of devices in schools, internet connectivity emerged as a crucial challenge. Teachers remarked that unreliable Wi-Fi connectivity in schools makes it impossible to use or access digital resources, resulting in the failure to integrate ICT into the teaching of Social Sciences. This is extremely problematic in the teaching of Social Sciences, as the multimedia model of teaching (for example, videos, simulations, and maps) enhances learners’ understanding and academic achievement. Teachers identified load shedding and power breaks as other serious factors that disturb well-planned ICT-based lessons.

Participant C3 remarked:

*“Load shedding is a serious problem as we do not have any backup plan in our school and this would mean my lessons are disrupted and delayed, as I have to revert to the chalk and talk method. The other challenge is that we are resource-constrained as a school. Another challenge is that our learners are not allowed to bring their own tablets or phones to school.”*

This shows that without a backup energy plan, ICT integration becomes an impractical task.

Other barriers mentioned by the teachers were unmounted and movable projectors that take a lot of time to set up, resulting in interruptions to the lesson flow. Moreover, there was the issue of classrooms not designed to accommodate ICT tools (C5; C6). Teachers in township schools reported safety concerns, noting that the high level of crime makes storing ICT tools risky, limiting their availability and accessibility for teaching and integration in Social Sciences (C8).

Within the TAM, various challenges encountered by participants when integrating ICT are known to indirectly weaken PU and directly weaken PEOU. Davis (1989:323) states that, when users view the system as too challenging to adopt and use, they develop negative attitudes towards the system that further deters them from

appreciating its usefulness. In the context of this study, challenges such as a lack of technical support, limited access to functional ICT tools, and poor internet coverage frustrated teachers and made the process of ICT integration feel more demanding than it was a transformative tool. Subsequently, participants' consistent efforts to integrate ICT into the teaching of Social Sciences were discouraged.

The empirical findings support this relationship. Teo *et al.* (2020:79–81) maintained that although teachers hold a positive attitude towards technology integration, insufficient infrastructure and a lack of technical support reduce their PEOU. Similarly, Sumile and Lozano (2025:2653) stated that teachers' confidence in integrating ICT meaningfully in the classroom is undermined by factors such as limited availability and poor functionality of ICT tools. These findings suggest two barriers (institutional and contextual) that serve as cognitive impediments within the TAM, influencing how teachers assess the effort involved in using ICT and its instructional value in the teaching of Social Sciences.

Furthermore, perceived usefulness may be eroded by persistent challenges over a period. When teachers experience a persistent lack of technical support at the institutional level, they may come to view ICT integration as slowing the flow of teaching rather than enhancing teaching effectiveness. Aurangzeb *et al.* (2024:162) observed that when teachers experience recurring ICT-related challenges, they revert to traditional teaching methods, despite the theoretical benefits of using technology in the classroom.

#### **4.5.6 Theme 6: Strategies for effective ICT integration**

The researcher posed the following question to explore the strategies adopted by teachers to ensure effective ICT integration: *“What strategies have you used to incorporate ICT tools in your Social Sciences teaching?”*

Although these challenges are persistent, many participants demonstrated high resilience and enthusiasm in integrating ICT tools in the Social Sciences classroom whenever possible. Participants described how they improvised to integrate ICT into their resource-constrained schools. Other participants shared the ICT tools to ensure that at least one class could benefit from ICT-supported teaching and learning (C6). Other participants used pre-downloaded videos from home to avoid internet

connectivity issues (C2), and a few moved temporarily to classrooms that already had projectors when planning ICT-supported lesson delivery (C5).

In contexts where the school failed to provide participants with internet connectivity, participants improvised by purchasing mobile data with their own funds to access digital resources (C8, C9). This attitude was summarised by participant C4, stating:

*“I always plan ahead, I book the projector two days before. I buy my own data for internet connectivity. So, I always have to improvise with some of my materials to ensure that I integrate ICT in Social Sciences.”*

The TAM is used to clearly understand the strategies conveyed by the participants in this study, primarily the construct of PEOU. Irrespective of the persistent challenges, the majority of the participants continued to show flexibility in integrating ICT by using their personal mobile data, downloading subject-related content, planning, and sharing ICT resources. These strategies played a crucial role in ensuring that the effort associated with utilising ICT is reduced by making sure that technology integration is manageable and more workable in practice. Within the TAM, when users devise ways to reduce the difficulty and uncertainty associated with ICT integration, their perceived ease of use increases, helping them to use and adopt technology (Davis, 1989:321). This view is supported by recent studies, which state that when teachers adopt adaptive strategies, ICT integration is most likely to be sustained even when under-resourcing is persistent (Mapisa & Makena, 2024:214).

These strategies played a significant role in strengthening PU by leveraging ICT to achieve educational outcomes. This practical success helped the participant leverage their belief that ICT can improve learner engagement and understanding in the classroom, despite the infrastructure challenges experienced by the schools. The studies by Murithi and Yoo (2021:2) and Sumile and Lozano (2025:2653) correspondingly found that when teachers experience the positive impact of their efforts to integrate ICT tools in the classroom, their perception of the usefulness of technology in education strengthens. In relation to TAM terms, the self-initiated strategies by users serve as mediating practices between the PU and PEOU, permitting the integration of ICT to continue even when the institutional support is lacking.

Although these strategies demonstrate participants' innovativeness, they also reveal structural unfairness. Moreover, rather than the systems put in place by the school, the success of ICT integration is more influenced by teachers' personal sacrifice and resourcefulness. This strengthens the idea that teacher motivation alone is not sufficient to ensure ICT integration. The following supportive conditions are needed at the school level for effective ICT integration: planning, budgeting, leadership and management, and infrastructure, rather than personal improvisation.

#### **4.5.7 Theme 7: Management support from the SMT**

The integration of ICT tools in the teaching of Social Sciences was found to be strongly influenced by the support and practice of Social Sciences departmental heads (DHs), in particular, the School Management Team (SMT) as a whole. The participants consistently expressed that leadership involvement, or the lack thereof, greatly determined the extent to which ICT integration is sustained, supported, and prioritised. Most of the Social Sciences departmental heads (leaders) admitted a lack of a structured implementation method.

The departmental heads (DHs) expressed that there is no clear support system in place.

One DH2 remarked that:

*“There is no proper support structure within the school; therefore, support is given when the need arises or to the teachers who are in need at that time.”*

The DH's response highlights that the school operates without the necessary support to integrate ICT. This strongly suggests that support is highly inconsistent and provided only to certain individuals or based on certain situations. This further confirms that the leadership is more reactive to situations rather than being proactive.

Moreover, the other departmental head confirmed this limitation, observing that ICT was not included in the planning cycle of the departmental heads.

DH1 remarked that:

*“We mostly focus on the administration part of our job. We do not monitor ICT as part and parcel of our teaching.”*

This highlights that the integration of ICT has not been formally implemented as part of the departmental monitoring process and remains non-compulsory in most cases.

Participants shared similar views, stressing that the SMT support was more of a reactionary process than a planned one. Participant C2 articulated the limitations, stating that:

*“Our management does not push to ensure that ICT is fully implemented in all the grades; they could use the LTSM money, but they do not do that.”*

This statement demonstrates that there is a lack of commitment from the school management to integrate ICT in all the grades, even when there are funds for LTSM.

Participant (C7) concurred, emphasising that the involvement of the leadership is not at its maximum level:

*“ICT here it is just a talk during our meetings or when we talk about improving the results from there, we will not even see any steps taken. In addition, committees are encouraged to write and submit their own budget for the sake of the Annual General Meeting (AGM).”*

The participant's response suggests that planning only takes place at a theoretical level, but does not translate into visible actions that can improve the teaching and learning process, which causes frustration for teachers. The submission of a budget for the Annual General Meeting (AGM) without any actions might be seen by teachers as additional administrative work and done only for compliance, not as a way of finding a way to support ICT integration in the school.

Another teacher (C4) further strengthened this point by directly associating the uneven ICT distribution across the institution with leadership failure to act:

*“The SMT does not make follow-ups and whether the teacher integrates ICT tools or not totally depends on the teacher.”*

This statement suggests that there are no monitoring systems or accountability mechanisms in place by the SMT to ensure that the integration of ICT materialises. Teachers are left to decide whether to integrate ICT, creating an inconsistent system in which integration becomes a personal choice rather than a school-driven policy.

More evidence shows that management support can lean toward passivity, focusing on issues as they arise rather than planning and remaining proactive. DH3 echoed this reactive attitude:

*“We often help teachers when the problem comes because we do not have an ICT plan that can drive integration of these ICT tools throughout the term.”*

This supports the pattern of a lack of accountability in the monitoring system for ICT tools and the Social Sciences teacher evaluation process. Together, these responses highlight that the leadership has not situated the ICT integration as a strategic priority, but rather it is treated as optional and as a process that has to be driven by teachers.

The findings revealed that the role of management, i.e., the Social Sciences DHs and the SMT, in moulding the experiences of Social Sciences teachers integrating ICT into their pedagogies is significant. This is supported by Wang *et al.* (2022:510), who state that when the school management shares a vision that determines the success of ICT, puts the ICT policy in place that details how ICT resources should be integrated into the curriculum, and ensures that teachers have all the needed skills to help them integrate ICTs into their lessons, the integration process becomes a success. However, the lack of a structured ICT implementation plan, monitoring systems, and leadership support that is reactive rather than proactive has resulted in teacher-driven ICT integration, and, to some extent, the integration process remains optional. From the view of TAM, such leadership inconsistencies weaken the PEOU (Davis, 1989:323), as teachers are exposed to a lack of access to resources, limited leadership guidance, and insufficient supportive leadership structures (Prestoza & Naldoza, 2025:3). On the contrary, recent studies reveal that for ICT to be adopted successfully, school leaders must play a pivotal role in shaping the innovative culture of the school positively by strongly aligning their vision for ICT with planned educational transformation (Rasool & Naidoo, 2024:11).

Furthermore, management inaction directly affects PU. The failure of the SMT to prioritise ICT resources and to put accountability measures in place directly affects teachers negatively, resulting in teachers failing to see ICT as a catalytic tool. TAM proposes that users are likely to accept technology when its perceived value is strongly reinforced by institutional conditions (Davis, 1989:323). In the context of this study, the lack of proactive management means that the integration of ICT is more of an

individual initiative rather than a structured, systematic support in schools. Shil (2024) observed that the leadership support from the school provides a prediction of teachers' views on ICT's usefulness and sustainability. Similarly, Madanchian and Taherdoost (2023:21) observed that weak management in schools breeds failure to achieve growth and improve ICT. In TAM terms, PEOU and PU are both weakened by a lack of structured support from the leadership, resulting in long-term delays in ICT adoption in the Social Sciences.

#### **4.5.8 Theme 8: School and policy influence on ICT integration**

National, provincial, and school policies play a very important part in giving shape to the integration of ICT tools in the teaching of Social Sciences. The participants remarked that, though ICT integration policies exist, their practical implementation is largely constrained, resulting in disparities in access and integration across schools and grades.

One of the key policy influences driving the integration of ICT tools in schools is the Learning, Teaching, Support, and Materials (LTSM) policy. The DHs and the teachers stated that the schools mostly adhere to the LTSM policy, which prioritises the provision of content textbooks over investment in ICT infrastructure. This national curriculum policy (LTSM), which seeks to ensure that learners have the foundational content, creates imbalances in the provisioning and rollout of ICT tools in schools.

DH1 remarked:

*“Both Grade 4 and 5 classes do not have a smartboard. It is only in the grade 6 and 7 block where we have integrated ICT tools. However, we are currently trying to make sure that all learners have Social Sciences textbooks first, as per LTSM policy. Then, we will therefore consider purchasing more smartboards in the near future.”*

The above account revealed that schools focused on remaining compliant with basic curriculum delivery requirements rather than on assimilating transformative teaching strategies. Consequently, learners miss the opportunity to learn with ICT tools and develop the necessary 21st-century digital skills. This allocation system results in an imbalance of resources, with some learners using ICT while others are subjected to traditional teaching and learning methods.

DH1 stated that:

*“In our school ICT integration is highly driven by the policy of ICT, hence, the smartboards are already mounted on the wall and readily connected, and well managed. When the teacher arrives at the school, he or she just switches on and carries on with the lesson.”*

The above reveals that the integration of ICT is made possible through policy; hence, the school had smartboards that were integrated and ready to be used. This further suggests that teacher do not battle with setting up, as the technological tools are there and they just come and integrate them into their own lessons. The implication is that access to proper technological infrastructure and a clear ICT policy do help teachers to adopt technology into their teaching pedagogies, as it can serve as a tool for transformation.

DH3 remarked:

*“Yes, they are readily available and accessible. Regarding the internet connection, it is available and reliable, so teachers can use technology at any time. We use laptops that are connected to the projectors and then the internet as well. All this is guided by our school policy, because I believe if it was not for our school ICT policy, we would be struggling with monitoring and managing our ICT resources.”*

This response indicates strong support at the institutional level. In ensuring that there is infrastructure and it remains accessible to the teachers. The statement further notes that there is a clear policy that provides guidance and accountability. This suggests that well-structured policies are very important in sustaining the integration of ICT in schools.

Regarding safety and security, policies include measures that influence the integration of ICT tools. Schools adopt very strict rules to prevent theft or damage to ICT tools, such as using the caging method to ensure their smartboards are safe. The departmental head plays a crucial role in ensuring adherence to these policies, conducting audits and managing access.

DH1 Participant remarked:

*“The ICT is well managed at our school because our smartboards are always locked or caged. During break time, teachers make sure that there are no learners in the classroom who will play with the smartboards. There are ICT policies that manage how smartboards should be used, and we have a committee that is responsible for checking smartboards if they are working or if it is damaged, or if the smartboard needs to be serviced.”*

Although these policies are key for protecting the ICT tools, they can also be too rigid for teachers to use the ICT tools innovatively. Furthermore, this tension between security procedures and pedagogical necessities highlights the wider challenges of balancing managerial control with effective teaching practices.

The national and school policies play a central role in shaping the integration of ICT in the teaching of Social Sciences, particularly in the articulation of allocation of resources and safety measures. From the standpoint of the TAM, teachers' PU and PEOU are strongly affected by these policies (Davis, 1989:324). The participants in this study remarked that adhering to the LTSM policy has resulted in the school having to prioritise the textbooks over ICT infrastructure, which led to lower grades failing to integrate ICT tools such as smartboards and projectors. This worsened teachers' efforts, weakening PU and directly dropping PEOU, with teachers consequently failing to perceive and exploit the full potential of ICT (Aurangzeb *et al.*, 2024:162).

In addition, the rigid monitoring systems used to safeguard ICT tools can lead teachers to fail to bring about innovation in their lessons, resulting in a reduction in PEOU of ICT in the classroom. On the other hand, schools that are able to combine forward-thinking vision, policies, and the provision and accessibility of ICT infrastructure have the chance to strengthen both PU and PEOU, encouraging continuous ICT adoption (Msambwa, Daniel & Lianyu, 2024:2). These findings revealed that the implementation of policy rather than the existence of policy is important to enhance acceptance of technology and its integration in the teaching of Social Sciences.

The findings of this theme show that although schools have ICT policies intended to guide the utilisation of ICT, these policies are applied unevenly. The decision about the ICT resources, priority, and safety varies between grades and schools, resulting in unequal ICT access. This implies that, even though ICT policies exist, they do not

lead to fair and consistent use of ICT tools in the Social Sciences classroom. Table 9 summarises these themes and their subthemes as extracted from the primary data.

**Table 8.** Summary table with themes and subthemes

| Themes                                                                 | Subthemes that emerged from the data                                                                                                                                                                        |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Theme 1: Uneven ICT integration of tools in Social Sciences classrooms | Lack of sufficient ICT tools, lack of access to the available ICT tools, infrastructure challenges pertaining to the integration of ICT, and lack of institutional support for sustainable adoption of ICT. |
| Theme 2: Teacher training and professional development                 | Teacher training workshops (provided by the Department of Education and the schools) lack depth in teacher training and continuity.                                                                         |
| Theme 3: The benefits of integrating ICT in Social Sciences            | Enhanced learners' involvement and active participation, support in terms of conceptual development, improved learner motivation and lesson delivery.                                                       |
| Theme 4: Teachers' skills and competence in using ICT                  | Developing teachers' ICT competence and enhancing their confidence as a product of training, and exposing teachers to ICT tools.                                                                            |
| Theme 5: Challenges experienced in ICT integration                     | Insufficient ICT resources and infrastructure in schools, poor internet connectivity and constant electrical cuts, high workload and insufficient time.                                                     |
| Theme 6: Strategies for effective ICT integration                      | Teachers using their own devices and mobile data, teamwork in problem solving among teachers, showing resilience and adoption of adaptive strategies to integrate ICT.                                      |
| Theme 7: Management support from the SMT                               | Structured planning, monitoring and allocation of resources, reactive support rather than strategic support, and the influence of management on the motivation of teachers and their profession.            |
| Theme 8: School and policy influence on ICT integration                | Gaps between classroom realities and the available policies lead to uneven integration of ICT, unfair access to ICT resources and inconsistent implementation.                                              |

**Source:** Own Compilation (2026)

#### **4.6 Summary of the chapter**

This chapter presented and analysed the empirical data generated through the semi-structured interviews conducted with the participating Social Sciences teachers and HoDs. The findings were organised according to the themes and sub-themes that emerged from the thematic analysis and were presented using participants' narratives, supported by relevant tables and figures where appropriate. The presentation of the findings remained aligned with the research questions and the objectives of the study. Thus, the TAM provided a systematic account of participants' experiences of integrating ICT into the pedagogies of Social Sciences teaching.

From the researcher's perspective, organising the findings according to themes and sub-themes enabled the participants' voices to remain central throughout the analysis. This provided a coherent and systematic presentation of the empirical evidence. This approach helped clarify the patterns emerging from the data without prematurely interpreting their broader implications.

Chapter 5 discusses in more detail the findings presented here as well as the existing literature, the TAM and the research objectives. It also presents the conclusions from the study and makes recommendations for policy, practice and future research.

## **CHAPTER 5: SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS**

### **5.1 Introduction**

Chapter 4 analysed, discussed, and conferred on the findings of this study. The purpose of the study was to explore Social Sciences teachers' experiences in integrating ICT tools in their teaching pedagogies in Tshwane West District, Gauteng Province, South Africa. The study explored Social Sciences teachers' perceptions, lived experiences, challenges, and strategies for integrating ICT tools into their teaching pedagogies.

The participants in the study comprised 12 Social Sciences teachers and 3 departmental heads who were directly involved in curriculum management and instructional leadership. Data were collected from 3 primary schools in the Tshwane West District of Gauteng Province, South Africa. The collected data was analysed using thematic analysis and presented narratively. The researcher used the literature that was reviewed in chapters two and three to validate and contextualise the findings of this study.

From the researcher's perspective, the interpretation of the findings extends beyond describing participants' experiences. However, the chapter provided further insight into the factors influencing ICT integration in classroom practice. Linking the empirical evidence to the theoretical framework and the existing literature provided an explanation not only of what the participants experienced but also of why these experiences happened in their respective educational contexts.

The chapter ends with the presentation of the general conclusions of the study, its contribution to knowledge, the contextual implications of the results obtained and the proposals of recommendations; these are aimed at educational policy makers, school leaders, teachers and future researchers, with the aim of reinforcing the integration of ICT in the teaching of Social Sciences.

### **5.2 Summary of the study**

This section summarises the main issues discussed in previous chapters (1-4) of the study.

The first chapter introduced the study and served as a framework. Moreover, the background to the study was discussed; also, the research problem was outlined, as well as the study's main aim and objectives. The chapter further provided an account of the importance of ICT, viewing it as a critical component in 21st-century education, and emphasised the initiatives made by both international and South African governments to enhance technology-driven education (Mathebula *et al.*, 2025:57). The chapter revealed that, despite the efforts made by the Gauteng Department of Education (GDE) to invest in the integration of ICT, Social Sciences teachers in primary schools still depend on the traditional teaching approaches. There is concern that integrating technology effectively into teaching approaches is still a major challenge, so more studies need to be conducted to find better and more creative ways to use ICT tools (Mokhtari, 2023:160). This demonstrates the existing gap between resource availability and effective classroom use in South African schools. The focus was to explore teachers' lived experiences of integrating ICT tools into their teaching pedagogies in the Tshwane West District in Gauteng, South Africa.

The second chapter of the study provided a review of the literature that is in line with the research questions. The chapter examined the key concepts such as the definition of ICT, Department of Basic Education (DBE) policy on ICT incorporation in Social Sciences teaching, Social Sciences curriculum and ICT integration, the benefits of ICT in Social Sciences teaching, teaching of Social Sciences using ICT tools, teaching methods aligned with ICT, requirements for ICT integration in teaching Social Sciences, and challenges related to ICT adoption. The Technology Acceptance Model (TAM) by Davis (1989) was adopted to explain Social Sciences teachers' perceptions of integrating ICT, in relation to perceived ease of use (PEOU) and perceived usefulness (PU). The literature shows that, although ICT has the capacity to transform education, its effectiveness is often constrained by a lack of teacher training, limited resources, and teacher resistance to change (Mathebula *et al.*, 2025:57).

The third chapter outlined the methodology of the study. The interpretivism research paradigm was used to guide the study. A qualitative research approach was adopted using a phenomenological design, which made it possible to collect data directly from the participants. Purposive sampling was used to select the participants of the study, those with less experience and those with more experience in Social Sciences teaching and ICT integration (Ting *et al.*, 2025:3). Data was collected through semi-

structured interviews with teachers (four per school) and departmental heads for Social Sciences (one per school) from three different primary schools. Furthermore, this led to the adoption of the thematic content method of data analysis. Additionally, employing such data analysis method led to the development of themes on which most topics discussed in the research are based (Naeem *et al.*, 2023:2). Member checking and prolonged engagement with the data contributed to the trustworthiness of findings (Birt *et al.*, 2016:1803). The participants were selected based on their knowledge and experience with the adoption of ICT tools in Social Sciences in primary school. To ensure adherence to ethical principles, the researcher applied for ethical clearance from the UNISA research ethics committee and prepared the interview guides and consent forms before collecting data.

The fourth chapter analysed, presented, and discussed the findings of the study from the three selected schools in the Tshwane West District of Gauteng Province, South Africa. The GDE and participating schools granted the researcher permission to conduct the study in the district and the three schools. All the participants signed the consent forms before the data collection process commenced. The study included 15 participants, and during data analysis and presentation, eight themes emerged and were aligned with the research questions and the theoretical framework (TAM).

The main research themes are outlined below:

### **5.2.1 Uneven ICT integration of tools in Social Sciences**

The findings of the study confirmed that the incorporation of ICT is uneven across the schools. Participants from well-resourced schools reported being equipped with ICT tools such as smartboards, internet coverage, digital projectors, and laptops, which enabled them to incorporate ICT into their Social Sciences classrooms to enhance lesson delivery, learner involvement, and visualisation of abstract content. On the other hand, participants from resource-constrained schools reported that they depended heavily on their own resources, such as their smartphones and laptops; this reflects resilience and improvisation despite institutional constraints.

### **5.2.2 Teacher training and professional development**

The findings of this study revealed that teacher professional development and training served as both an enabler and a barrier. While a few participants reported benefiting from in-service teacher training and district-led training, a significant number relied on

self-directed learning and the pre-service training they received at university. This has led to uneven ICT integration across the district, revealing unequal ICT competence levels among the Social Sciences teachers. This has direct negative consequences, as it weakens PEOU and impedes sustained ICT adoption, as explained by TAM.

### **5.2.3 The benefits of integrating ICT in Social Sciences**

Regardless of the challenges mentioned by the participants, they perceived ICT in Social Sciences education to have pedagogical value. ICT was reported as a transformative agent in education by enhancing learner involvement, improving the comprehension of concepts that are taught, accommodating a variety of learners, and ultimately playing a central role in information retention. The participants, therefore, remarked that ICT is not an extra tool in the classroom, but rather a promoter of learner-centred learning and inclusive pedagogy. The positive attitudes held by the participants towards the integration of ICT, even among schools with a lack of resources, were created by a strong perception of PU in using the ICT tools.

### **5.2.4 Teachers' skills and competence in using ICT**

The confidence and competence of the participants were not the same; however, they were strongly associated with access, exposure, and continuous ICT training. Participants with access to ICT tools in their schools reported high confidence in using and adopting ICT in their classes; conversely, those with limited access to ICT tools experienced uncertainty, despite acknowledging the value of ICT in the teaching of Social Sciences. This finding revealed that participants' confidence develops when there is access to ICT, support, and conditions, not as a product of personality traits.

### **5.2.5 Challenges experienced in ICT integration**

The majority of the barriers that emerged as persistent, such as power cuts, security issues, lack of technical support, and lack of internet connection, were a result of systemic and infrastructural issues. These challenges directly affected PEOU and later eroded perceived usefulness, which resulted in participants going back to their traditional teaching methods regardless of their positive attitudes towards ICT use and adoption.

### **5.2.6 Strategies for effective ICT integration**

To ensure that ICT was incorporated effectively into the teaching and learning of Social Sciences, the participants used various coping mechanisms such as pre-downloading

content videos, purchasing their own data, using their smartphones, and relocating lessons. Although these strategies helped participants to integrate ICT, they demonstrated serious inequalities, and the process of ICT integration relied heavily on the efforts of the participants rather than the support from schools to ensure that the process of integration became a success.

#### **5.2.7 Management support from the SMT**

The management and support given to the participants were found to be inconsistent and mostly reactive rather than proactive. The lack of proper implementation plans, systems of monitoring, and accountability has led to participants being left alone when it comes to the adoption and use of ICT, instead operating as part of the institutional system. This has eroded the support needed for ICT integration and affected the long-term ICT integration plan, making it harder to implement.

#### **5.2.8 School and policy influence on ICT integration**

Finally, the issue of policy enactment regarding the implementation of the Learning, Teaching, Support, and Materials (LTSM) policy was described as placing greater emphasis on the procurement of textbooks rather than on infrastructure. This has created some serious inequalities in access to ICT tools and reduced the value of ICT in the Social Sciences classroom.

### **5.3 Recommendations**

Based on these findings, the following recommendations are intended to enhance the use of ICT tools in Social Sciences teaching in primary schools, particularly in the Tshwane West District of Gauteng Province, South Africa.

#### **5.3.1 Recommendations to schools**

- i. Schools should invest in developing and implementing a clear and well-detailed ICT integration plan, which is strongly aligned with the curriculum delivery. The plan should address the material conditions of the school, particularly in the teaching of Social Sciences. ICT should be integrated into the processes of lesson planning, lesson monitoring, and teacher appraisal (QMS).
- ii. The provision of infrastructure should move beyond the pilot schools to ensure that there is fair access to the resources across the district, especially in township schools and the resource-constrained schools. This entails providing

internet connectivity, technical support, and regular maintenance of ICT tools to ensure they remain in excellent condition at all times.

- iii. There should be an alignment of policies by critically reviewing the LTSM policy so that ICT resources are prioritised alongside learner textbooks, not treated as a top-up.

### **5.3.2 Recommendations to District**

- i. To enhance the integration of ICT, the district should improve monitoring systems and ensure that there is accountability, consistent implementation, and ongoing support for teachers and the SMT.
- ii. The district should have continuous ICT training for Social Sciences teachers.
- iii. The district should have workshops specifically for policy development for teachers, so that schools can have teachers who can develop rigorous ICT policies and how to implement those policies.

### **5.4 Recommendations for further research**

Future studies could focus on:

- i. Investigating the experiences of learners on using ICT tools in the Social Sciences classroom.
- ii. Explore the role of various leadership styles in sustaining the integration of ICT in Social Sciences.
- iii. Conduct comprehensive research across all districts to establish best practices in integrating ICT in education.
- iv. Critically examine the long-term impact that the use of ICT has on the academic achievements of learners and their development of digital competences.

### **5.5 Conclusion of the study**

This study concludes that the incorporation of ICT tools in Social Sciences classrooms in primary schools does not only depend on teachers' attitudes, but rather numerous complex multiple factors contribute to the successful integration, such as infrastructure, adequate ICT resources, leadership, policy development and implementation and, most importantly, teacher development and training that is ICT-related. While teachers acknowledge the educational value, ICT holds in education, systemic constraints hinder the meaningful adaptation and use of ICT in classrooms.

The findings of this study also shows that contextual and institutional factors shape the PEOU and PU, as guided by the TAM. To ensure that ICT becomes sustainable and transformative, it is important that there is strong leadership, a coherent ICT policy, access to ICT tools, teacher training and development, and infrastructure to support the incorporation of ICT.

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## LIST OF APPENDICES

### APPENDIX A: ETHICAL CLEARANCE CERTIFICATE

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                     |
| College of Education _ERC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                     |
| <p>Date: 11/09/2025</p> <p>Dear: Mr Samuel Tuli Dinga</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"><b>Decision: Ethics Approval from 11/09/2025 to 10/09/2028</b></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <div style="border: 1px solid black; padding: 5px;"><p>NHREC Registration # : (if applicable)</p><p>Ref #: 7133</p><p>Name: Mr Samuel Tuli Dinga</p><p>Student #: 56728646</p><p>Staff #:</p></div> |
| <hr/> <p><b>Researcher:</b> Mr Samuel Tuli Dinga</p> <p>175 Selokwe Park Street, Peace Haven, Randfontein</p> <p>Randfontein</p> <p>56728646@mylife.unisa.ac.za 0670079826</p> <p><b>Supervisor:</b> Dr SAMSON LETSOAKA TSHABALALA tshabsli@unisa.ac.za</p> <p><b>Co-Supervisor:</b></p> <p><b>Co-Researcher(s):</b></p> <p><b>Email address:</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                     |
| <div style="border: 1px solid black; padding: 5px;"><b>SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT.</b></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                     |
| <p><b>Qualification:</b> MEd</p> <hr/> <p>Thank you for the application for research ethics approval by the College of Education _ERC for the above-mentioned research study. Ethics approval is granted for <b>three years</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                     |
| <div style="border: 1px solid black; padding: 5px;"><p>The <b>low risk application</b> was <b>reviewed</b> by the College of Education _ERC in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.</p><p>The proposed research may now commence with the provisions that:</p><ol style="list-style-type: none"><li>1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.</li><li>2. Any adverse circumstance arising during the undertaking of the research study that may affect the ethical integrity of the study, including those involving research participants, third parties, or juristic persons, must be reported in writing to the College of Education _ERC without delay.</li><li>3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.</li><li>4. Any changes that may affect study-related risks to research participants, juristic or third persons, must be reported in writing to the College of Education _ERC, accompanied by a progress report.</li></ol></div> |                                                                                                                                                                                                     |
| Page 1 of 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                     |

5. The researcher will ensure that the research study complies with all applicable national legislation, professional codes of conduct, institutional guidelines, and scientific standards relevant to the specific field of study. Where applicable, adherence to the following South African legislation is essential: the Protection of Personal Information Act (No. 4 of 2013), the Children's Act (No. 38 of 2005), and the National Health Act (No. 61 of 2003).
6. Future use of this research data is permitted only in de-identified form and only for secondary research with objectives similar to those of the original study. Any secondary use involving identifiable human data will require additional ethics clearance.
7. No fieldwork activities may continue beyond the stated expiry date (10/09/2028). A completed Research Ethics Progress Report must be submitted as an application for renewal and is subject to approval by the Research Ethics Committee. A Close-Out Report must be submitted upon completion of the research study.
8. The College of Education \_ERC may require the submission of regular progress reports on an **annual** basis, in alignment with Section 7.2 of the Unisa Policy on Research Ethics (2024).

**Additional Conditions**

1. Disclosure of data to third parties is prohibited without explicit consent from the research participants and Unisa.
2. Research data must be stored in compliance with the university's research data management policy for a period of up to 15 years.
3. When publishing the results, the researcher must take appropriate precautions to safeguard the confidentiality and privacy of the research participants, juristic persons, third parties, and the university, in accordance with institutional policies and ethical standards.
4. Adherence to the National Statement on Ethical Research and Publication Practices, specifically Principle 7 on Social Awareness, must be ensured. This principle states: 'Researchers and institutions must be sensitive to the potential impact of their research on society, marginal groups, or individuals, and must consider these when weighing the benefits of the research against any harmful effects, with a view to minimising or avoiding the latter where possible.' The University of South Africa (Unisa) accepts no liability for any failure to comply with this principle.

**Note**

The reference number 7133 should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Kind regards,



Prof Justin Oswin August  
Chair of College of Education \_ERC  
E-mail: augustjo@unisa.ac.za



Page 2 of 3

Prof M Makoe  
Executive Dean / By delegation from the Executive Dean of College of Education  
E-mail: makisme@unisa.ac.za, magolmc@unisa.ac.za

## APPENDIX B: LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH IN GAUTENG DEPARTMENT OF EDUCATION



REQUESTING PERMISSION TO CONDUCT RESEARCH AT THREE PRIMARY SCHOOLS IN TSHWANE WEST DISTRICT.

Samuel Tuli Dinga  
175 Selokwe Peak Street  
Peace-haven, Randfontein  
1795

03 June 2025

The District Director  
Old Hebron College  
Klipgat Road (near Odi Hospital)  
Mabopane, South Africa  
Private Bag X04  
Camperdown, 3720  
South Africa Gauteng

Dear Madam/Sir

**RE: Request for permission to conduct research at three primary schools in Tshwane West District.**

My name is Samuel Tuli Dinga. I am doing research under the supervision of Dr T.S Tshabalala, in the Department of Curriculum and Instructional Studies, toward a Master's degree in Education (Curriculum Studies) at the University of South Africa (UNISA). This letter serves as an invitation to you to participate in my research on the topic stated below.

Should you have any questions regarding my research, Dr T.S Tshabalala may be contacted. His telephone number is 0124296051, and his email address [tshabsi@unisa.ac.za](mailto:tshabsi@unisa.ac.za). My contact details are 067007826 and my e-mail is [st0732593176@gmail.com](mailto:st0732593176@gmail.com).

My study is titled: SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT.

The main aim of the study is to explore the experiences of Social Sciences teachers in integrating ICT tools into their pedagogies by investigating the available training and support for these teachers, identifying technological resources that enhance the teaching of Social Sciences in primary schools within the Tshwane West District, and exploring the perspectives of Social Sciences teachers on utilising ICT in their classroom.

A total of 15 participants, which includes 3 departmental heads and 12 post level one teachers, will be selected to take part in this study. UNISA has granted me an ethics clearance certificate, which is attached to this letter. There is no predictable harm associated with this study. All necessary measures to minimise the possible spread of COVID-19 or any risk will be adhered to. Override of control of data and information will be stated that all personal information and responses shall be maintained and kept secret and anonymous. Hence, participants' names or school affiliations will never be disclosed in any result that will be published. The data that will be used in this study will be well sorted, and only the researcher and the supervisor will have a chance to use them. Participants will also be made aware that



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they are free to withdraw from the study at any one time without any repercussions. There will be no incentives or compensation for taking part in the research. The feedback on research will be given to Gauteng DoE and, upon request the link to download the entire dissertation shall be given.

Yours Sincerely

Samuel Tuli Dinga

## APPENDIX C: PERMISSION TO CONDUCT RESEARCH – GDE



**GAUTENG PROVINCE**  
Department: Education  
REPUBLIC OF SOUTH AFRICA

8/4/4/1/2

### GDE RESEARCH APPROVAL LETTER

|                                |                                                                                                                                                            |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Date:                          | 17 September 2025                                                                                                                                          |
| Validity of Research Approval: | 08 February 2025– 30 September 2025<br>2025/496                                                                                                            |
| Name of Researcher:            | Dinga ST                                                                                                                                                   |
| Address of Researcher:         | 175 Selokwe Park Street<br>Peacehaven , Randfontein                                                                                                        |
| Telephone Number:              | 0670079826                                                                                                                                                 |
| Email address:                 | st0732593176@gmail.com                                                                                                                                     |
| Research Topic:                | Social Sciences Teachers' Experiences in Integrating Information and Communication Technology Tools in their Teaching Pedagogies in Tshwane West District. |
| Name of University:            | UNISA                                                                                                                                                      |
| Type of qualification          | Masters                                                                                                                                                    |
| Number and type of schools:    | 3 Primary Schools                                                                                                                                          |
| District/s/HO                  | Tshwane West                                                                                                                                               |

#### **Re: Approval in Respect of Request to Conduct Research**

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

1

Making education a societal priority

**Office of the Director: Education Research and Knowledge Management**

7<sup>th</sup> Floor, 17 Simmonds Street, Johannesburg, 2001

Tel: (011) 355 0488

Email: Faith.Tshabalala@gauteng.gov.za

Website: www.education.gpg.gov.za

1. Letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.
2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.
3. *Because of the relaxation of COVID 19 regulations researchers can collect data online, telephonically, physically access schools or may make arrangements for Zoom with the school Principal. Requests for such arrangements should be submitted to the GDE Education Research and Knowledge Management directorate.*
4. *The Researchers are advised to wear a mask at all times, Social distance at all times, Provide a vaccination certificate or negative COVID-19 test, not older than 72 hours, and Sanitise frequently.*
5. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.
6. A letter / document that outline the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.
7. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.
8. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
9. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.
10. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
11. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.
12. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
13. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.
14. On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.
15. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.
16. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

Mr. David Bapela  
CES: Education Research and Knowledge Management

DATE: 18/09/2025

Making education a societal priority

Office of the Director: Education Research and Knowledge Management

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## APPENDIX D: TURNITIN REPORT

| Similarity Report                                                                                                                                                                                                                                                                                                                                                                                                           |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| PAPER NAME                                                                                                                                                                                                                                                                                                                                                                                                                  | AUTHOR                      |
| SOCIAL SCIENCES TEACHERS%E2%80%99 EXPERIENCES IN INTEGRATING ICT TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT.docx                                                                                                                                                                                                                                                                                           | SAMUEL TULI DINGA           |
| WORD COUNT                                                                                                                                                                                                                                                                                                                                                                                                                  | CHARACTER COUNT             |
| 41435 Words                                                                                                                                                                                                                                                                                                                                                                                                                 | 245807 Characters           |
| PAGE COUNT                                                                                                                                                                                                                                                                                                                                                                                                                  | FILE SIZE                   |
| 139 Pages                                                                                                                                                                                                                                                                                                                                                                                                                   | 3.1MB                       |
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## APPENDIX E: INTERVIEW QUESTIONS FOR TEACHERS



### SEMI- STRUCTURED INTERVIEW GUIDE: FOR TEACHERS

#### Introduction

- Welcome participants and introduce the purpose of the study.
- Explain the format of the discussion and expected duration.
- Assure confidentiality and encourage open, honest responses.
- Obtain informed consent if required.

**Research title: SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT.**

1. How do you integrate ICT in the teaching of Social Sciences in your classroom?
2. What professional development initiatives have you received to integrate ICT tools in teaching social sciences?
3. What are the benefits of using ICT tools in teaching Social Sciences?
4. How confident are you in using ICT tools to teach Social Sciences?
5. What challenges have you encountered while using ICT tools in the Social Sciences classroom?
6. What strategies have you used to incorporate ICT tools in your Social Sciences teaching?

## APPENDIX F: INTERVIEW QUESTIONS FOR DEPARTMENTAL HEADS



### SEMI- STRUCTURED INTERVIEW GUIDE: FOR DEPARTMENTAL HEADS

#### Introduction

- Welcome participants and introduce the purpose of the study.
- Explain the format of the discussion and expected duration.
- Assure confidentiality and encourage open, honest responses.
- Obtain informed consent if required.

#### SEMI-STRUCTURED INTERVIEWS SCHEDULE FOR DEPARTMENTAL HEADS

**Research title: SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT.**

1. What support mechanisms do you give to your teachers in integrating ICT to teach Social Sciences?
2. Are ICT tools readily available and accessible for you in your classroom?
3. How do you monitor progress in your department, specifically to ICT integration in Social Sciences?
4. What is your perspective regarding the current state of ICT adoption particularly within the Social Sciences curriculum in your department?
5. What are your key duties as a departmental head in ensuring that ICT tools are successfully managed and integrated in your department?



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## APPENDIX G: REQUEST FOR PERMISSION LETTERS



### REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT YOUR SCHOOL

Samuel Tuli Dinga  
175 Selokwe Peak Street  
Peace-haven, Randfontein  
1795

The principal

#### RE: Request for permission to conduct research at your school

My name is Samuel Tuli Dinga. I am doing research under the supervision of Dr T.S Tshabalala, in the Department of Curriculum and Instructional Studies, toward a Master's degree in Education (Curriculum Studies) at the University of South Africa (UNISA). This letter serves as an invitation to you to participate in my research on the topic stated below.

Should you have any questions regarding my research, Dr T.S Tshabalala may be contacted. His telephone number is 0124296051 and his email address tshabsi@unisa.ac.za. My contact details are 067007826 and my e-mail is [st0732593176@gmail.com](mailto:st0732593176@gmail.com).

My study is titled: SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT.

The main aim of the study is to explore the experiences of Social Sciences teachers in integrating ICT tools into their pedagogies by investigating the available training and support for these teachers, identifying technological resources that enhance the teaching of Social Sciences in primary schools within the Tshwane West District, and exploring the perspectives of Social Sciences teachers on utilising ICT in their classroom.

A total of 15 participants which includes 3 departmental heads, and 12 post level one teachers will be selected to take part in this study. UNISA has granted me an ethics clearance certificate which is attached to this letter. There is no predictable harm associated with this study. All necessary measures to minimise the possible spread of COVID-19 or any risk will be adhered to. Override of control of data and information will be stated that all personal information and response shall be maintained and kept secret and anonymous. Hence, participants' names or school affiliation will never be disclosed in any result that will be published. The data that will be used in this study will be well sorted and only the researcher and the supervisor will have a chance to use them. Participants will also be made aware that they are free to withdraw from the study at any one time without any repercussions.

There will be no incentives or compensation for taking part in the research. The feedback on the research will be given to Gauteng DoE and, upon request the link to download the entire dissertation shall be given.

Yours Sincerely

Samuel Tuli Dinga



University of South Africa  
Pretorius Street, Muckleneuk Ridge, City of Tshwane

**REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT YOUR SCHOOL**

Samuel Tuli Dinga  
175 Selokwe Peak Street  
Peace-haven, Randfontein  
1795

The School Governing Body

**RE: Request for permission to conduct research at your school**

My name is Samuel Tuli Dinga, I am doing research under the supervision of Dr T.S Tshabalala, in the Department of Curriculum and Instructional Studies, toward a Master's degree in Education (Curriculum Studies) at the University of South Africa (UNISA). This letter serves as an invitation to you to participate in my research on the topic stated below.

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Yours Sincerely

Samuel Tuli Dinga

## APPENDIX H: INVITATION TO PARTICIPANTS

### INVITATION TO PARTICIPATE IN AN INTERVIEW

Samuel Tuli Dinga  
175 Selokwe Peak Street  
Peace-haven, Randfontein  
1795

Social Sciences Departmental Head

#### RE: invitation to participate in an interview.

My name is Samuel Tuli Dinga. I am doing research under the supervision of Dr T.S Tshabalala, in the Department of Curriculum and Instructional Studies, towards a Master's degree in Education (Curriculum Studies) at the University of South Africa (UNISA). This letter serves as an invitation to you to participate in my research on the topic stated below.

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My study is titled: SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT.

The main aim of the study is to explore the experiences of Social Sciences teachers in integrating ICT tools into their pedagogies by investigating the available training and support for these teachers, identifying technological resources that enhance the teaching of Social Sciences in primary schools within the Tshwane West District, and exploring the perspectives of Social Sciences teachers on utilising ICT in their classroom.

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There will be no incentives or compensation for taking part in the research. The feedback on research will be given to Gauteng DoE and, upon request the link to download the entire dissertation shall be given.

Yours Sincerely

Samuel Tuli Dinga

University of South Africa  
Pretorius Street, Muckleneuk Ridge, City of Tshwane

## INVITATION TO PARTICIPATE IN AN INTERVIEW

Samuel Tuli Dinga  
175 Selokwe Peak Street  
Peace-haven, Randfontein  
1795

Social Sciences teacher(s)

### RE: invitation to participate in an interview.

My name is Samuel Tuli Dinga. I am doing research under the supervision of Dr T.S Tshabalala, in the Department of Curriculum and Instructional Studies, towards a Master's degree in Education (Curriculum Studies) at the University of South Africa (UNISA). This letter serves as an invitation to you to participate in my research on the topic stated below.

Should you have any questions regarding my research, Dr T.S Tshabalala may be contacted. His telephone number is 0124296051 and his email address tshabs1@unisa.ac.za. My contact details are 067007826 and my e-mail is [st0732593176@gmail.com](mailto:st0732593176@gmail.com).

My study is titled: SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT.

The main aim of the study is to explore the experiences of Social Sciences teachers in integrating ICT tools into their pedagogies by investigating the available training and support for these teachers, identifying technological resources that enhance the teaching of Social Sciences in primary schools within the Tshwane West District, and exploring the perspectives of Social Sciences teachers on utilising ICT in their classroom.

A total of 15 participants which includes 3 departmental heads, and 12 post level one teachers will be selected to take part in this study. UNISA has granted me an ethics clearance certificate which is attached to this letter. There is no predictable harm associated with this study. All necessary measures to minimise the possible spread of COVID-19 or any risk will be adhered to.

There will be no incentives or compensation for taking part in the research. The feedback on the research will be given to Gauteng DoE and, upon request the link to download the entire dissertation shall be given.

Yours Sincerely

Samuel Tuli Dinga

## APPENDIX I: PARTICIPANT'S INFORMED CONSENT LETTER

### INFORMED CONSENT LETTER

**Title:** SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT.

Dear Prospective Participant

My name is Samuel Tuli Dinga, I am doing research under the supervision of Dr T.S Tshabalala, in the Department of Curriculum and Instructional Studies, toward a Master's degree in Education (Curriculum Studies) at the University of South Africa (UNISA). This letter serves as an invitation to you to participate in my research on the above stated topic

Should you have any questions regarding my research, Dr T.S Tshabalala may be contacted. His telephone number is 0124296051 and his email address tshabs1@unisa.ac.za, My contact details are 067007826 and my e-mail is [st0732593176@gmail.com](mailto:st0732593176@gmail.com).

#### What is the purpose of the study?

The purpose of this study is to explore the experiences of Social Sciences teachers in integrating ICT tools into their pedagogies by investigating the available training and support for these teachers, identifying technological resources that enhance the teaching of Social Sciences in primary schools within the Tshwane West District, and exploring the perspectives of Social Sciences teachers on utilising ICT in their classroom.

#### Why am I being invited to participate?

I selected you to participate in this research because I believe that you are at liberty to provide data relevant to my research question, based on your understanding and experience of ICT tool integration into pedagogy.

#### What is the nature of my participation in this study?

Data collection in this study will involve administering face-to-face semi-structured interviews on participants, and observations of the participants. I kindly invite you to partake in the face-to-face interviews whereby the interview will include 10 questions (5 for Departmental heads and 5 for teachers). It is humbly requested that when answering questions one should be free and not hide the truth but state his or her perception, ideas, and information. If you do not object, the interview will be conducted with the help of a cell phone or a laptop voice recorder. This interview should take only 30 minutes and will happen at your school or any place comfortable for you at a specific date and time.

#### Can I withdraw from this study even having agreed to participate?

This means that participation in this study is voluntary and thus you have the right not to participate if you do not wish to do so. You are also advised that you also have full liberty to withdraw your participation at any time without any questions being asked and without giving any reason in the process. In case you opt into this study, you will receive the information sheet to retain and you will be required to fill the consent form.



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[www.unisa.ac.za](http://www.unisa.ac.za)

**What are the potential benefits of taking part in this study?**

The information obtained from this study will benefit your school as it will help teachers and departmental heads to better understand the integration process of ICT into their pedagogy. Findings from this research will contribute to the improvement of ICT integration in Social Sciences which will also help to improve teaching and learning of Social Sciences.

**Are there any negative consequences for me if I participate in the research project?**

In this study, there are no likely risks for you as a participant, and no foreseeable risks/ harm are associated with the interviews as it is for research purposes only.

**With the information that I convey to the researcher, will my identity be kept confidential?**

You also have the right to insist to remain anonymous if you are a participant in the research. While conducting this study, the researcher will make sure that participants' rights to privacy, confidentiality, and anonymity will be upheld. All participants' name as well as the names of all involving schools will be concealed to ensure anonymity. To maintain confidentiality, children will be referred to as School A, School B and School C. The participants will be assured that no other person or organization has access to the information given to the researcher only. Everything that is stated or presented by participants of the interviews will be used solely for the purpose of the research and all identifying data will be kept secret. All respondents will be having individual interviews whereby each will be interviewed individually. Any recorded interview will also be kept safely in the researcher's personal laptop and password-protected.

**How will the researcher(s) protect the security of data?**

In particular, all data collected from each participant will be kept safely by the researcher. The data will be only available to the researcher and no other person will be allowed to access the data. All the printed data will be kept in a secured locked cabinet where nobody will be having access to the keys apart from the researcher. These printed data will be kept for five years and will assist the researcher on future academic purposes and research work. All the electronic records will be kept in the personal laptop of the researcher and shall be password protected. All the hard and electronic copy data and records that are stored shall be shredded permanently and all the electronic data stored shall be wiped off from the personal laptop of the researcher after five years.

**Will I receive payment or any incentives for participating in this research?**

The following are the Rights of the participants: There will be no payment or any other form of compensation for participating in this study. A copy of a final dissertation/findings shall be provided to you. Let me also use this occasion and express my appreciation in advance for your assistance to me by expressing your willingness to participate in this study. This consent form will be given to you, should you wish to participate in this study as will be described here below.

**Has the study received ethics approval?**

This study has received written approval from the research ethics review committee of the college of Education at UNISA. If you wish to obtain the ethical clearance letter, please request the researcher to give it to you.

**How will I be informed of the findings/results of the research?**

Should you wish to be informed of the findings or require any further information or want to contact the researcher about any aspect of this research, you may contact Samuel Tuli Dinga on 0670069826 or e-mail st0372593176@gmail.com. The findings are accessible for 3 months. Should you have concerns about the way in which the research has been conducted, you may contact Dr T.S Tshabalala at 0124296051, or e-mail tshabs1@unisa.ac.za. Alternatively, contact the research ethics committee review chairperson of the college of Education at www.unisa.ac.za/cedu. Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

Samuel Tuli Dinga



University of South Africa  
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www.unisa.ac.za

**Consent form to participate in this study (return slip)**

I ..... confirm that the person asking my consent to take part in this research has fully informed me about the nature, procedure, potential benefits, and anticipated inconvenience of participation.

I have read (or it had been explained to me) and understood the study as explained in the information sheet (informed consent letter). I understand that this research will attempt to explore SOCIAL SCIENCES TEACHERS' EXPERIENCES IN INTEGRATING ICT TOOLS IN THEIR TEACHING PEDAGOGIES IN TSHWANE WEST DISTRICT. I had sufficient opportunity to ask questions and I am prepared to participate in the study. I understand that my participation is voluntary and that I am free to withdraw at any time without penalties or negative consequences. I am aware that the findings of this study will be processed in a research dissertation, and that my participation will be kept confidential unless otherwise specified. I agree to give my consent in supplying information through a **face-to-face semi-structured interview, recorded by an audio recorder**. My information will be stored in a safely locked cabinet for five (5) years. I confirm that I was informed that if I have any questions about my rights as a study participant or if I am dissatisfied at any time with any aspect of the study, I may contact Mr Samuel Tuli Dinga (researcher) at 0670079826. I have received a signed copy of the informed consent agreement.

With full knowledge of all the foregoing, I agree to participate voluntarily in this study.

Participant's name and surname: .....

Participant's signature: ..... Date: .....

Researcher's name and surname: Samuel Tuli Dinga

Researcher's signature ..... Date .....



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## APPENDIX J: EDITOR'S CERTIFICATE

# Certificate of Editing

This is to certify that I, *Pule Matthews Mogerosi*, a qualified professional copy editor, certificate no: 59679311-01-J9B0 (UCT), affiliated with Eudoxia Research University (ERC/IIP/3091), have edited the following mini-dissertation.

### Title of Dissertation/Thesis:

Social Sciences Teachers' Experiences In Integrating ICT Tools in their Teaching Pedagogies in Tshwane West District

### Author (Student):

ST DINGA



[orcid.org/0000-0000-0000-0000](https://orcid.org/0000-0000-0000-0000)

Student Number: 56728646

### Qualification

Magister Educationis: Curriculum and Instructional Studies

### Scope of Editing:

I, the undersigned, performed an academic edit on this manuscript, which included:

- Language editing: UK (grammar, spelling, punctuation, syntax, clarity, and coherence).
- Structural editing refinement to enhance academic rigour and logical flow.
- Referencing consistency checks
- Technical Conformity (tables, figures, headings, numbering)

### Declaration:

I am not a member of the author (student) supervisory, assessment, or examination committee. All ideas, arguments, analyses, interpretations, and conclusions are solely the author's own evidence. No academic content was added, modified, or created, other than improving language and presentation. All edits were conducted ethically and in accordance with academic integrity standards.

**Editor's Details:**

Name: Pule Matthews Mogorosi

Qualifications: MBA (NWU) | PGDip: Management (NWU) | PGCE (NWU)

PGDip: HTM (UCT) | NDip: Ele Eng (CUT) | OHS (UCT)

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Signature: \_\_\_\_\_

Date: 10 May 2026

