INNOVATIVE DIGITAL PEDAGOGY: A CASE STUDY OF DIGITALLY-ENHANCED BUSINESS STUDIES IN GRADE 12

By

SIYABONGA ANDRIAS MAGOSO

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SUPERVISOR: DR. K. MBATHA

OCTOBER 2025

Declaration by student

Name: Siyabonga Andrias Magoso

Student Number: 48843490

Degree: Doctor of Philosophy in Education (Curriculum Studies)

I declare that **"Innovative Digital Pedagogy: A Case Study of Digitally-Enhanced Business Studies in Grade 12"** is my own work and that all the sources I have used or quoted have been indicated or acknowledged by means of complete references.

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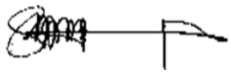

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This dissertation was submitted with my approval.

Dr. K. Mbatha

28/10/2025
Date:

Dedication

This dissertation is dedicated to all who dream, persevere, and believe that knowledge can transform lives. May this work be a small contribution to that shared vision.

This work is dedicated to my parents, Mr Zwelakhe “Mali” Magoso and Mrs “MaMtolo” Yekeleni Magoso, who inculcated a love of education in all of us in our family.

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Abstract

As education has transitioned into digitalisation with increased reliance on science and technology, the integration of digital technology has transformed the teaching profession enabling teachers to enhance their professional practices. This transition allows teachers to design innovative lessons that support inclusive education, promote learner engagement and provide access to diverse learning resources, thereby improving teaching and learning outcomes. Technology also encourages teachers to think creatively and adopt new teaching approaches, fostering a culture of innovation in the classroom.

This qualitative case study, located within an interpretive paradigm, explored the pedagogical approaches used by teachers to integrate digital technologies into Business Studies lessons in rural secondary schools in the Harry Gwala District. Purposive and convenience sampling techniques were used to select six Business Studies teachers from six different secondary schools in a rural context. Data were generated through semi-structured interviews and lesson observations and were analysed and interpreted using thematic analysis. The study was guided by Engagement Theory and Conversational Theory.

The findings revealed that digital technology plays an important role in enhancing the teaching and learning of Business Studies. Participants indicated that technology helped simplify abstract concepts, increased learner engagement and promoted collaboration among learners. Teachers also reported using various digital tools and social media platforms to communicate and share information with learners.

The study also revealed that teachers attend workshops, webinars and training programmes offered by schools, districts and external organisations to strengthen their digital competencies. The study recommends continuous professional development to enhance teachers' digital competencies and pedagogical practices. It also encourages the adoption of innovative, learner-centred strategies such as self-directed learning, flipped classrooms and multimedia tools to improve learner engagement in Business Studies.

Keywords:

Innovative pedagogy, Digital technology, Education technology, ICT integration, Innovative pedagogical approaches, ICT professional teacher development.

Isifinyezo

Njengoba umhlaba uya ngokuya uba sedijithali futhi uncika kakhulu kusayensi nobuchwepheshe, ukufakwa kobuchwepheshe bedijithali kushintshe umsebenzi wobuthisha ngokubanika amandla okuthuthukisa imikhuba yabo yobungcweti. Lolu shintsho luvumela othisha ukuthi bakhe izifundo ezintsha ezisekela imfundo ebandakanya bonke abafundi, zikhuthaze ukubamba iqhaza kwabafundi futhi zinikeze ukufinyelela ezinsizeni zokufunda ezihlukahlukene, ngaleyo ndlela kuthuthukiswe imiphumela yokufundisa nokufunda. Ubuchwepheshe buphinde bukhuthaze othisha ukuthi bacabange ngobuciko futhi bamukele izindlela ezintsha zokufundisa, okwakha isiko lokusungula ezintweni ezintsha ekilasini.

Lolu cwaningo olusezingeni lekhwalithi (qualitative case study), olusungulwe ngaphansi kwepharadayimu yokuhumusha (interpretive paradigm), luhlolisise izindlela zokufundisa ezisetshenziswa othisha ukuhlanganisa ubuchwepheshe bedijithali ezifundweni zeBusiness Studies ezikoleni zamabanga aphezulu ezisemakhaya esifundeni saseHarry Gwala. Kusetshenziswe izindlela zokukhetha ababambiqhaza ngenhloso (purposive sampling) kanye nokutholakala kalula (convenience sampling) ukukhetha othisha abayisithupha beBusiness Studies abavela ezikoleni eziyisithupha ezihlukene zasemakhaya. Idatha yaqoqwa ngezinhlelo zezingxoxo ezihleliwe kancane (semi-structured interviews) kanye nokubhekwa kwezifundo (lesson observations), yabe isihlaziywa yahunyushwa kusetshenziswa ukuhlaziywa kwezindikimba (thematic analysis). Ucwaningo lwaluholwa yi-Engagement Theory kanye ne-Conversational Theory.

Imiphumela yocwaningo iveze ukuthi ubuchwepheshe bedijithali budlala indima ebalulekile ekuthuthukiseni ukufundisa nokufunda kweBusiness Studies. Ababambiqhaza babike ukuthi ubuchwepheshe busiza ukwenza lula imiqondo eyinkimbinkimbi, bukhulisa ukubamba iqhaza kwabafundi futhi bukhuthaza ukubambisana phakathi kwabafundi. Othisha baphinde babika ukusebenzisa amathuluzi ahlukahlukene edijithali kanye nezinkundla zokuxhumana (social media) ukuxhumana nokwabelana ngolwazi nabafundi.

Ucwaningo luphinde lwaveza ukuthi othisha bayaya emihlanganweni yokuqeqeshwa (workshops), ama-webinar kanye nezinhlelo zokuqeqesha ezinikezwa izikole, izifunda kanye nezinhlangano zangaphandle ukuze baqinise amakhono abo edijithali. Ucwaningo luncoma

ukuqhubeka kokuthuthukiswa kobungcweti (continuous professional development) ukuze kuthuthukiswe amakhono edijithali othisha kanye nezindlela zabo zokufundisa. Luphinde lukhuthaze ukwamukelwa kwezindlela ezintsha ezigxile kumfundi ezifana nokuzifundela (self-directed learning), amakilasi aphenduliwe (flipped classrooms) kanye nokusetshenziswa kwamathuluzi e-multimedia ukuze kuthuthukiswe ukubamba iqhaza kwabafundi kuBusiness Studies.

Amagama asemqoka:
Izindlela zokufundisa ezintsha, Ubuchwepheshe bedijithali, Ubuchwepheshe bemfundo, Ukuhlanganiswa kwe-ICT, Izindlela ezintsha zokufundisa, Ukuthuthukiswa kobungcweti kothisha kwe-ICT.

Opsomming

Namate die wêreld toenemend digitaal word en meer op wetenskap en tegnologie staatmaak, het die integrasie van digitale tegnologie die onderwysberoep getransformeer deur onderwysers in staat te stel om hul professionele praktyke te verbeter. Hierdie verskuiwing stel onderwysers in staat om innoverende lesse te ontwerp wat inklusiewe onderwys ondersteun, leerderbetrokkenheid bevorder en toegang tot diverse leerhulpbronne bied, en sodoende onderrig- en leeruitkomste verbeter. Tegnologie moedig onderwysers ook aan om kreatief te dink en nuwe onderrigbenaderings aan te neem, wat ’n kultuur van innovasie in die klaskamer bevorder.

Hierdie kwalitatiewe gevallestudie, geleë binne ’n interpretatiewe paradigma, het die pedagogiese benaderings ondersoek wat deur onderwysers gebruik word om digitale tegnologieë in Besigheidstudie-lesse in landelike sekondêre skole in die Harry Gwala-distrik te integreer. Doelgerigte en gerieflikheidsteekproefneming is gebruik om ses Besigheidstudie-onderwysers uit ses verskillende sekondêre skole in ’n landelike konteks te selekteer. Data is gegenereer deur semi-gestruktureerde onderhoude en leswaarnemings en is geanaliseer en geïnterpreteer met behulp van tematiese analise. Die studie is gelei deur die Betrokkenheidsteorie (Engagement Theory) en Gespreksteorie (Conversational Theory).

Die bevindings het getoon dat digitale tegnologie ’n belangrike rol speel in die verbetering van die onderrig en leer van Besigheidstudies. Deelnemers het aangedui dat tegnologie help om abstrakte konsepte te vereenvoudig, leerderbetrokkenheid te verhoog en samewerking onder leerders te bevorder. Onderwysers het ook gerapporteer dat hulle verskeie digitale hulpmiddels en sosiale media-platforms gebruik om met leerders te kommunikeer en inligting te deel.

Die studie het verder bevind dat onderwysers werkswinkels, webinars en opleidingsprogramme bywoon wat deur skole, distrikte en eksterne organisasies aangebied word om hul digitale vaardighede te versterk. Die studie beveel deurlopende professionele ontwikkeling aan om onderwysers se digitale bevoegdhede en pedagogiese praktyke te verbeter. Dit moedig ook die aanvaarding van innoverende, leerdergesentreerde strategieë aan, soos selfgerigte leer, omgekeerde klaskamers (flipped classrooms) en multimediahulpmiddels om leerderbetrokkenheid in Besigheidstudies te verbeter.

Sleutelwoorde:

Innoverende pedagogie; Digitale tegnologie; Opvoedkundige tegnologie; IKT-integrasie; Innoverende pedagogiese benaderings; IKT-professionele onderwyserontwikkeling.

List of acronyms

CAPS	Curriculum and Assessment Policy Statements
COVID 19	Coronavirus Disease
DBE	Department of Basic Education
DOE	Department of Education
FET	Further Education and Training
ICT	Information and Communication Technology
KZN	KwaZulu-Natal
NSC	National Senior Certificate
UNISA	University of South Africa

Clarification of concepts

This section outlines the definition of crucial concepts used in this study.

Information and Communication Technology	Information and Communication Technology (ICT) can be described as a "combination of networks, hardware and software as well as the means of communication, collaboration and engagement that enable the processing, management and exchange of data, information and knowledge" (DoE, 2004).
Innovative Pedagogy	Innovative pedagogy involves the use of different approaches to enhance teaching and learning. It involves the use of different strategies, such as integrating technology (Peterson et al. 2018) .
Digital Technology	In this study, digital technology refers to the use of various technological resources, such as whiteboards, computers, internet, projectors, audio-visual media, and digital equipment to supplement traditional methods of face-to-face teaching. This assists in improving the quality of teaching and learning (Basilaia & Kvavadze, 2020).
ICT integration	Ghavifekr and Rosdy (2015) define ICT Integration as the

utilisation of diverse technologies in the teaching and learning process in a classroom environment. To integrate technology in class, teachers use various ICT resources, such as smartphones, laptops, computers, and smartboards, to communicate and disseminate information to learners.

List of tables

List of figures

List of appendices

Table of Contents

Chapter 1
Introduction and background

1.1 Introduction

The 21st century marks a pivotal era characterised by substantial technological transformations, significantly influencing the operations of governments, businesses, and the education sector globally. Amidst these changes, the Corona Virus Disease (COVID-19) pandemic has further accelerated the exploration of alternative pedagogical approaches, particularly in educational settings. This era underscores the imperative for teachers to not only embrace creativity and innovation but also to develop proficiency in Information and Communication Technology (ICT) to facilitate the delivery of curriculum effectively (Isabirye et al., 2025)

Integrating ICT in education has proven to be a transformative process, as evidenced by various studies. For instance, research has shown that ICT integration in education leads to improved educator efficacy and enhanced student academic achievements (Malnar, 2008). Furthermore, advancements in technology have revolutionised teaching methods, enabling anytime access to information and redefining the role of teachers as pivotal knowledge providers (Mahmud & Ismail, 2010). The shift towards technology-enhanced teaching and learning practices fosters active and collaborative learning, thus positively impacting learners' academic outcomes (Sithole, 2023). Recognising the critical role of technology, Jackson (2017) highlights its essentiality in ensuring equitable and high-quality education, noting that teachers who integrate ICT in classrooms gain crucial skills in technical knowledge (TK), Pedagogical Content Knowledge (PCK), and Technical Pedagogical Knowledge. Xhuraj et al. (2023), based on the challenges and advantages of integrating technology in teaching and learning, revealed that integrating technology into curriculum delivery enables learners to be well-prepared for the future and modern world. They further stated that technology makes it easier for learners to access information anytime and anywhere by using various search engines.

In the South African context, the integration of technology in education has received formal recognition, particularly in the Curriculum and Assessment Policy Statements (CAPS) for

Business Studies in the Further Education and Training Phase (Grades 10-12). These policies mandate the use of the internet and audio-visual media as instructional tools, preparing learners for both academic success and their future professional roles (DBE, 2011). However, a notable gap persists in understanding the practical integration of these ICT pedagogical tools in the teaching and learning process, especially in rural secondary schools (Mathevula & Uwizeyimana, 2014).

1.2 Background of study

The integration of ICT in education has emerged as a cornerstone in advancing teaching and learning methodologies globally. This surge in technology usage has seamlessly integrated computers and other digital devices into our daily lives, particularly in the 21st century (Ehsan & Faqiry, 2021). The transformative role of technology in enhancing the quality of education is well-documented, with digital tools reshaping instructional practices to benefit both teachers and learners (Mathevula & Uwizeyimana, 2014).

According to Fialho, Cid, and Coppi (2023), digital technologies facilitate the sharing of a wide range of resources, allowing learners to access learning support materials at their own pace, thus preparing them better for a modern world. This global trend towards integrating technology in curriculum delivery is evident in various regions, including Europe and Asia, where diverse ICT policies are implemented to cater to specific educational needs (European Commission, 2018; Yuen & Hew, 2018; Ghavifekr et al., 2014). However, these advancements are not without challenges, including issues related to teachers' proficiency, internet connectivity, and system stability, which are crucial for effective implementation.

In the African context, significant governmental investments have been made to integrate technology into the educational framework of countries like Kenya, Botswana, Mauritius, Ghana, and South Africa (UNESCO, 2015). Furthermore, the integration of ICT in schools has been a pivotal part of educational reforms since the post-apartheid era, aiming to create a more equitable educational landscape (Department of Education, 1996). Notable ICT initiatives include the Khanya project and the Gauteng Online and Paperless School project, which have been instrumental in integrating technology into classrooms (Isaacs, 2007). The White Paper on E-Education, published in 2004, marked a significant milestone in South Africa's journey towards technological integration in education, outlining a comprehensive

strategy for ICT incorporation in schools (Department of Education, 2004). However, achieving these goals has been challenging, with issues like limited technology access in rural areas, insufficient professional development in ICT for teachers, and a gap in policy implementation at the school level (Skhakhane, Maphalala & Govender, 2021). Despite these challenges, the importance of ICT integration in education remains paramount. The modern educational landscape necessitates the use of technology resources such as computers, the internet, and various digital tools, not only to facilitate access to information but also to prepare learners for a future driven by digital literacy. This study, therefore, sought to explore the diverse pedagogical approaches employed by teachers in integrating digital technologies into Business Studies lessons and the variations in these approaches across different rural school settings in Harry Gwala District.

1.3 Problem statement

Across the globe, education systems are increasingly embracing innovative digital pedagogies to transform teaching and learning, foster critical thinking, and prepare learners for participation in rapidly evolving, technology-driven economies. Research from diverse contexts highlights the potential of digitally enhanced approaches to move classrooms away from rote, teacher-centred instruction towards more learner-centred, collaborative, and problem-solving pedagogies (DeWitt & Alias, 2023; Hamzah et al., 2024). Yet, despite these global advances, the integration of innovative digital pedagogy in South African classrooms remains fragmented, uneven, and under-researched at the level of specific subjects (Seegobin, 2024).

In Grade 12 Business Studies, a pivotal gateway subject for preparing learners for higher education, entrepreneurship, and the world of work, teaching practices remain predominantly traditional, characterised by rote learning, teacher-led delivery, and limited learner engagement (America & Skelly, 2021; Ngwenya et al., 2023). Although national policies such as the Department of Basic Education's e-Education strategy and various digital literacy initiatives signal a commitment to ICT integration, these interventions have primarily focused on infrastructure provision and generic teacher training rather than subject-specific pedagogical innovation. Consequently, little is known about how digital-enhanced approaches are actually reshaping Business Studies classrooms, particularly at the Grade 12 level, where learners' readiness for technology-intensive economies is most critical.

If this gap persists, South African learners risk remaining underprepared for participation in knowledge- and technology-driven economies. Business Studies education may continue to reproduce outdated knowledge transmission models that fail to cultivate entrepreneurial mindsets, digital fluency, and the critical problem-solving abilities demanded by the Fourth Industrial Revolution. This, in turn, could deepen educational inequalities, exacerbate youth unemployment, and undermine national development priorities linked to innovation and inclusive growth. This study, therefore, investigated how innovative digital pedagogy can be integrated into the teaching and learning of Grade 12 Business Studies. Using a qualitative case study approach, it explored the practices, challenges, and impacts of digitally enhanced pedagogy in real classroom contexts and generated contextually grounded insights to inform teacher practice.

1.4 Aim of the study

This study aimed to critically examine how innovative digital pedagogy is integrated into the teaching and learning of Grade 12 Business Studies, focusing on its effects on classroom practice, learner engagement, and subject mastery. It also sought to identify the challenges and opportunities of implementing digitally enhanced approaches to generate contextually relevant insights for improving teacher practice and learner outcomes.

1.5 Main research question

The main research question that guided this study was.

1. What innovative pedagogies do teachers utilise to enhance the teaching and learning of Business Studies Grade 12?

1.5.1 Research sub-questions

To answer the research main question, the following sub-questions were formulated:

1. What digital tools do teachers utilise to enhance the teaching of Business Studies Grade 12?
2. How do teachers integrate digital technology into their instructional design to enhance the teaching of Business Studies Grade 12?

3. What are teachers' experiences with the affordances of digital technology that enhance innovative pedagogy in Business Studies?
4. What professional development opportunities are available to Business Studies teachers to enhance their use of innovative pedagogy?

1.5.2 **Research objectives**

This study was guided by the listed objectives below to achieve the aim of the research.

1. To determine the digital tools utilised by teachers to enhance the teaching of Business Studies Grade 12.
2. To understand how teachers integrate digital technology to enhance the teaching of Business Studies Grade 12.
3. To examine teachers' experiences of the affordances of digital technology that enhance innovative pedagogy in Business Studies.
4. Determine professional development opportunities that are available to support Business Studies teachers to enhance the use of innovative pedagogy.

1.6 Significance of study

This study is significant in several ways. Firstly, it addresses a critical gap in the integration of digital pedagogy within South African secondary education by focusing on a subject-specific context, Grade 12 Business Studies. While much of the existing research has emphasised general ICT integration or focused on higher education, this study highlights the lived realities of teachers and learners in a subject that is central to preparing young people for entrepreneurship, commerce, and participation in the modern economy.

Secondly, the study contributes to the pedagogical transformation agenda by exploring how innovative digital approaches can move Business Studies teaching beyond traditional, teacher-centred methods. Insights from this research will inform educators on how to use digital tools to foster learner engagement, critical thinking, and problem-solving skills that are indispensable in the Fourth Industrial Revolution.

Thirdly, the study has policy relevance. Its findings can guide curriculum developers, policymakers, and educational leaders in designing strategies that align digital education

initiatives with subject-specific needs, rather than relying on generic or infrastructure-only approaches. This makes the study a valuable reference point for the Department of Basic Education's ongoing digital learning programmes and South Africa's broader digital skills development strategies.

Finally, the study's significance lies in its potential on social and economic impact. By equipping Grade 12 learners with enhanced digital and entrepreneurial competencies, the research contributes to addressing challenges of youth unemployment, economic inequality, and limited digital readiness. In doing so, it positions Business Studies not just as a school subject, but as a catalyst for preparing learners to thrive in technology-driven societies.

1.6.2 Justification for the study

The integration of digital technology in education has become increasingly significant in improving teaching and learning practices in the 21st century. Despite national policies and curriculum frameworks in South Africa advocating for the use of ICT in schools the implementation of digital pedagogy remains uneven, particularly in rural and under-resourced contexts. This study is justified by the need to explore how teachers in rural secondary schools integrate digital technology to enhance innovative pedagogies in the teaching of Business Studies.

The Harry Gwala District presents a unique educational context characterised by socio-economic challenges, limited infrastructure and a persistent digital divide. While, some schools have begun adopting digital technologies, many teachers and learners continue to face constraints such as inadequate access to devices, unreliable internet connectivity and limited digital skills. Moreover, there is limited empirical research that documents teachers' lived experiences of integrating digital tools under these conditions. This study therefore seeks to address this gap by providing context-specific insights into the realities, challenges and opportunities associated with digital-enhanced teaching in rural Business Studies classrooms.

Furthermore, Business Studies is a subject requires learners to develop critical thinking, problem-solving and entrepreneurial skills, which can be enhanced through the effective use of digital technologies. However, without a clear understanding of how teachers navigate

curriculum demands, pedagogical choices, and technological constraints, efforts to promote digital innovation may remain ineffective. This research is justified in that it contributes to understanding how digital technology can be meaningfully integrated to support innovative pedagogies that are responsive to both curriculum requirements and contextual realities.

1.7 Rationale for the study

The rapid evolution of digital technologies has reshaped the way knowledge is created, accessed, and applied across disciplines. In education, this shift demands innovative pedagogical approaches that not only enhance teaching and learning but also prepare learners with the digital and entrepreneurial competencies required in a globalised, technology-driven economy. In South Africa, however, the integration of digital pedagogy into secondary schooling remains uneven, often hindered by a focus on infrastructure and general ICT literacy rather than subject-specific application.

Business Studies, particularly at the Grade 12 level, occupies a unique position in preparing learners for higher education, entrepreneurship, and participation in the labour market. Yet, current teaching approaches remain predominantly traditional, with limited use of digital-enhanced strategies that can foster deeper learner engagement, critical thinking, and problem-solving. While there is a growing body of international research on digital pedagogy, very few studies have explored its application within Business Studies at the secondary school level in the South African context. This gap underscores the need for targeted research that goes beyond policy rhetoric to examine the lived experiences of teachers and learners, as well as the practical affordances and challenges of digital pedagogy in the classroom.

The rationale for this study, therefore, hinged on its potential to generate new, contextually relevant insights into how innovative digital pedagogy can transform Business Studies teaching and learning. By focusing on Grade 12 learners, the study responded to both educational and socioeconomic imperatives: improving learner outcomes, enhancing digital readiness, and equipping young people with the skills needed to thrive in the Fourth Industrial Revolution (4IR). The research is not only timely but necessary, as it addresses the pressing need to align South Africa's educational practices with global trends while remaining sensitive to local challenges and opportunities.

1.8 Chapter outline

Chapter One: Orientation and background

This chapter serves as the orientation of the study. It outlines the introduction, background, and rationale for the study. The chapter further presents the problem statement, research objectives and research questions of the study. It concludes with an overview of the structure of the dissertation.

Chapter Two: Literature review

This chapter presents a comprehensive review of the literature related to the study that is being investigated. It further explores key concepts underpinning the integration of technology in teaching Grade 12 Business Studies. The literature reviewed is based on study research questions and covers both local and international perspectives on the study phenomenon under investigation.

Chapter Three: Theoretical framework

This chapter presents the theoretical frameworks that underpin this study. It further examines Conversational Theory and Engagement Theory, which serve as theoretical lenses for this research.

Chapter Four: Research design and methodology

This chapter outlines the research methodology adopted in this study. It discussed research paradigm, sampling strategies, data collection instruments, and ethical considerations. The chapter concludes trustworthiness, data analysis and limitations of the study.

Chapter Five: Data analysis and interpretation

This chapter presents an analysis and interpretation of data, drawing on the relevant literature and theoretical frameworks that informed the study. The chapter presented the results obtained from all the participants through semi-structured interviews and lesson observations

Chapter Six: Contribution of study

This chapter presents the scholarly contribution of the study to the body of knowledge guided by Conversational theory and Engagement theory.

Chapter Seven: Summary, conclusions and recommendations

This chapter provides a summary of the entire study. It presents the conclusion and offers recommendations for future research based on the main findings.

1.9 Conclusion

This chapter introduced the study by providing background on exploring how innovative digital pedagogy can be integrated into the teaching and learning of Grade 12 Business Studies. Moreover, the chapter outlined the background, problem statement, aim, research questions and objectives that guide the study. The chapter further highlighted the significance and rationale for the study. To conclude, the chapter outlined the overview and division of each chapter in this study. The next chapter critically discusses the literature review that supports the study.

Chapter 2

Literature Review

2.1 Introduction

The preceding chapter introduced and outlined the background and the purpose of the study, which is to explore how innovative digital pedagogy can be integrated into the teaching and learning of Grade 12 Business Studies. This chapter presents a literature review relevant to this study. It begins by conceptualising pedagogy and examining the role of educational technology in teaching and learning. This is followed by a discussion on innovative pedagogical strategies and the ways in which digital tools can enhance teaching and learning processes. Thereafter, the chapter describes methods used by teachers to enhance teaching and learning and also examines how ICT affordances enhance teaching and learning of Business Studies. Next, the local and international perspectives on ICT integration are discussed, followed by an examination of the teaching of Business Studies within the South African context. The chapter concludes with a critical analysis of the barriers to ICT integration, including challenges related to accessibility, teacher readiness, cultural attitudes, and administrative experience. The literature review seeks to clarify the current state of digital technology integration in Business Studies, identify gaps in existing scholarship, and highlight the theoretical and practical implications for teachers working in rural South African schools.

2.1.1 Conceptualising pedagogy

Conceptualising pedagogy in the context of integrating diverse, innovative approaches in teaching Business Studies is crucial to understanding how instructional practices can be enhanced and transformed through digital technology. Peterson et al. (2018) maintained that different scholars define pedagogy in various ways, since it is a dynamic concept. This view highlights that people possess different perspectives on pedagogy and that various definitions of pedagogy in the literature.

Generally, researchers view the pedagogy concept as a teaching method employed by teachers to enhance teaching and learning and to promote the application of a variety of

teaching strategies to empower learners in the classroom environment. Shah and Campus (2021) assert that traditionally, pedagogy was understood as the art and science of teaching, encompassing the strategies, methods, and techniques employed by teachers to facilitate effective learning. Murphy (2008, p. 35) further describes pedagogy as the relationships and "interactions between teachers, learners and the learning environment and the learning tasks". On the same vein, Peterson et. al. (2018, p. 8) postulated that pedagogy is the key to effective teaching and learning, and they define it as "repeated patterns or sets of teaching and learning practices that shape the interaction between teachers and learners". This definition highlights that it is essential for teachers to select suitable approaches or techniques to enhance effective curriculum delivery. Nevertheless, Maja (2023) further elaborated that ICT pedagogy involves the integration of technology in lessons that are being conveyed to learners in order to enhance knowledge and understanding.

However, Shah and Campus (2021) argue that the notion of pedagogy is influenced by time and technological transformation in the world. Shah and Campus (2021) concur that in the 21st century, the definition of pedagogy has expanded by including the integration of digital technologies to foster more dynamic, interactive, and learner-centred learning environments. Bates (2015) and Eyyam and Yaratan (2014) argue that this shift is based on the recognition that technology can significantly enhance the teaching and learning process by providing access to a wealth of resources, enabling collaboration, and facilitating innovative assessment methods. Drawing from the above definition, this suggests that the role of ICT in education extends beyond mere digital tool usage, as it necessitates a transformation of pedagogy where teachers are not just transmitters of knowledge but facilitators of learning, guiding learners in navigating and constructing knowledge using digital technology. Therefore, this approach aligns with constructivist theories, which posit that learning is an active, contextualised process of constructing knowledge rather than passively acquiring it (Piaget, 1967; Vygotsky, 1978).

Wagner (2008) argues that integrating ICT into pedagogy means creating learning experiences that are meaningful, relevant, and engaging for learners, and preparing them for the challenges of the modern world. The integration of ICT into pedagogy also requires teachers to develop Technological Pedagogical Content Knowledge (TPACK). This framework emphasises the intersection of technology, pedagogy, and content knowledge as an essential aspect for effective teaching in the digital age (Mishra & Koehler, 2006). This

study posits that teachers need to understand not only the content they are teaching and the pedagogical approaches most effective for that content, but also how diverse technological resources can be used to enhance learning outcomes. This study maintained that teachers should utilise digital technology to understand business environments, facilitate discussions, or enable learners to collaborate on projects from different contexts.

However, the implementation of ICT in pedagogy for teaching and learning comes with various challenges, as most teachers fail to incorporate ICT pedagogy in their classes due to several factors. Van Dijk (2005) outlined four factors that contribute to the problem of digital technology in South Africa, including motivational, resource, skill shortage, and general usage of ICT resources. Access to technology and digital literacy varies significantly among learners, especially in rural areas. (Warschauer, 2004; Chisango & Marongwe, 2021; Faloye & Ajayi, 2022). Teachers also face barriers in terms of their own digital literacy, the availability of resources, internet connectivity and professional development support for integrating technology into their teaching practices (Ertmer & Ottenbreit-Leftwich, 2010; Chisango & Marongwe, 2021). Therefore, overcoming these challenges requires extensive professional development, infrastructure investment, and a shift in mindset towards valuing and integrating digital tools as core components of pedagogical strategy.

Despite these challenges, the potential of ICT pedagogy to transform educational practices is massive. The researcher's view is that digital pedagogy offers new ways to engage learners, personalise learning, and assess understanding through diverse and innovative methods. Digital pedagogy also enables teachers to prepare learners for a world in which technology and digital literacy are paramount. The researcher believes that understanding and applying the principles of effective ICT integration into pedagogy is not just an option but a necessity for teachers in the modern educational landscape to integrate innovative pedagogy in teaching and learning. Therefore, in embracing ICT in pedagogy, teachers are encouraged to explore beyond the traditional boundaries of teaching and learning. Moreover, the use of digital technologies as a pedagogical tool in teaching and learning encourages the development of 21st-century skills among teachers and learners, which may include critical thinking, creativity, collaboration, and digital literacy (Gcabashe, 2025). By integrating digital tools such as collaborative online platforms in the teaching of Business Studies, teachers can create authentic learning tasks that require learners to solve real-world problems, work in teams, and communicate effectively in various digital formats.

The shift towards a more technology-integrated pedagogy highlights the importance of teachers as lifelong learners. Therefore, to effectively incorporate diverse ICT pedagogy into teaching practices is mandatory for teachers. This view suggests that teachers should continuously update their knowledge and skills in both technology and pedagogical practice. In support of the above, Darling-Hammond et al. (2017) argue that teachers must not only attend professional development courses but also engage in self-directed learning through online communities of practice, webinars, and educational technology blogs. Therefore, such ongoing learning is crucial for teachers to keep abreast with the latest digital tools and pedagogical strategies, enabling them to offer their learners the most relevant and engaging learning experiences (Ertmer & Ottenbreit-Leftwich, 2010; Darling-Hammond et al., 2017).

The main concern in this study was to understand how diverse innovative ICT pedagogy is being incorporated into the classroom setting. Therefore, the effective integration of diverse pedagogy in schools requires various stakeholders to work together. Skhakhane et al. (2021) argue that the transition to a digitally enhanced pedagogy requires systemic support at various levels, including policy, school leadership, and community engagement. Keane et al. (2020) maintain that educational policies need to reflect the importance of ICT incorporation and provide the necessary funding and infrastructure to support this transition. They added that school leaders play a critical role in fostering a culture of innovation and providing teachers with the time, resources, and encouragement needed to experiment with new technologies and teaching methods. Similarly, Isaacs (2007) emphasised the importance of parents and the wider community in understanding the benefits of digital learning, which can help to build support for technology-enhanced education, particularly in rural areas where resources may be limited.

In summary, Helen, Beetham, and Sharpe (2007) maintained that conceptualising pedagogy involves rethinking not only how we teach but also how we learn. It requires an acknowledgement that the education landscape is changing and that the integration of ICT in teaching and learning is a key component of this transformative world. Therefore, in this study, the researcher believes that it is essential for teachers to adopt an inclusive approach that includes digital technologies in learning to enhance teaching and learning, as well as to prepare learners for a future that is increasingly digital.

2.2 Educational technology

For decades, numerous scholars have defined educational technology in various ways to demonstrate their understanding of educational technology in the literature. This suggests that there is no universal definition for educational technology. Spector (2013) asserts that it is difficult to define educational technology due to technological transformations and developments from decade to decade. Januszewski (2008) defines educational technology as "the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources". In their support, Govender and Khoza, as cited in Ramrathan (2017), also describe educational technology as the effective application of digital technological tools to enhance teaching and learning. This definition corresponds with Xhuraj et al. (2023), who maintained that educational technology includes a wide range of hardware, software, and methodologies designed to enhance teaching and learning. They further stated that technology allows teachers to solve learners' problems in the classroom and "provides learners with a way to connect curriculum to the real world" (Xhuraj et al., 2023, p. 119).

The above definition demonstrates that education technology has the potential to transform the way teachers teach and learners learn. Similarly, Hassan (2023) concurs that educational technology has transformed traditional teaching and learning practices into virtual platforms through the adoption of digital learning. A study conducted by Eyyam and Yaratan (2014) on the impact of using technology in mathematics lessons revealed that one of the key benefits of educational technology is its ability to improve learners' attitude towards learning and engagement. This responds to Kadir et al.'s (2014) views, who affirm that education technology enables both teachers and learners to acquire new knowledge, resulting in a positive attitude towards the use of digital technology.

Similarly, Henderson (2020) maintained that the integration of technology in lesson capture resulted in learners' interest being captured, leading to enjoyment of the subject being delivered. This view suggests that by integrating digital technology into the learning environment, teachers have the opportunity to create more interactive classroom contexts that facilitate active learning. Moreover, Johnson (2020) contends that educational technology provides learners with access to a wealth of information that significantly contributes to the reach of individual potential. In other words, this suggests that digital technology enables

learners to have opportunities to strengthen their knowledge and subject understanding, which contributes positively to outcomes. Vagg et al. (2020) pointed out that education technology provides access to multimedia resources which cater to various learning preferences and increase learners' engagement and retention of information. Similarly, according to DBE (2023), the integration of educational technology in teaching and learning provides an opportunity to access a wide range of multimedia resources that can assist in illustrating complex concepts in teaching various subjects.

In the context of this study, teaching Business Studies requires integration of digital technology like any other subject. Moreover, educational technology encourages personal or self-learning experiences from learners through adopting learning software or tools that allow them to learn in their own space (McLoughlin & Lee, 2010). This suggests that technology helps to ensure that learners are neither bored with content that is too easy nor overwhelmed by content that is too challenging. Das (2019) concurs that educational technology helps learners to become creative and innovative and be able to reflect on their own learning processes for future developments. She further stated that ICT provide learners with the opportunity to learn collaboratively as well as individually in their own space and time. Furthermore, Pratama et al. (2023) maintain that the growth of artificial intelligence (AI) in educational technology enables personalised learning experiences at one's own pace. They further stated that AI-driven platforms can analyse individual learners' performance data to identify strengths, weaknesses, and learning preferences, providing customised recommendations for study resources or adapting instructional content to meet each student's needs.

A mixed methods study conducted by Elmahdi, Al-Hattami and Fawzi (2018) on the use of technology for formative assessment to improve learners' learning in Bahrain revealed that the role of educational technology in facilitating formative assessment and feedback is another area of significant impact. They further noted that digital platforms such as PowerPoint slides enable the efficient administration of assessments with constructive feedback that helps learners identify areas for improvement promptly (Elmahdi et al., 2018). To support this view, Falloon (2020) opines that the integration of educational technology necessitates a discussion on digital literacy and ethical use of technology. However, Prasetiyo et al. (2023) maintain that as learners rapidly use digital technology, teachers must emphasise

the importance of responsible online behaviour, evaluating digital sources for credibility, and the ethical implications of digital content creation.

With regards to educational technology, Morel Spector (2022) cautions that the successful integration of educational technology requires careful planning and consideration of its pedagogical implications to teaching and learning. Esfijani and Zamani (2020) believe that teachers must be adequately trained to use technology effectively and to integrate it into their teaching in ways that enhance learning outcomes. They further assert that training programmes should consider the curriculum and syllabus. In addition, educational technology has the potential to significantly enhance the quality and accessibility of education across disciplines. Its successful integration into teaching and learning processes depends on strategic implementation that addresses infrastructure needs, pedagogical alignment, and equitable access. Therefore, teachers continue to explore and adopt innovative pedagogies; the focus should remain on enhancing student learning outcomes and preparing learners for a future where technology and digital literacy play a central role in professional success.

2.3 Innovative pedagogy

In the educational landscape, various innovative teaching strategies have emerged to transform teaching and learning. Perterson et al. (2018) assert that the primary objective of teaching is not just to transfer subject content to learners, but it is also about the way learners are taught and how they grasp information. They further stated that teachers should choose "their pedagogy not based on their own preference but according to a local/national curriculum structure". In the context of Business Studies in South Africa, teachers are guided by the CAPS. This information shows that adopting innovative pedagogy is crucial to accelerate learning and meet learners' needs.

Yulduz (2023, p. 221) concurs that teaching "learners require special approaches to plan and organise the educational process". Wagner (2008) opines that the objective of innovative pedagogy is to prepare learners for a rapidly changing world by equipping them with critical thinking skills, adaptability, and a lifelong passion for learning. Peterson et al. (2018) maintain that innovative pedagogy includes the use of a broad variety of teaching and learning strategies that leverage the power of technology to enhance educational experiences. They further stated that this approach goes beyond the use of digital tools or gadgets to

include the development of new methodologies and practices that engage learners in active, collaborative, and reflective learning. In the context of Business Studies, innovative pedagogy can transform the learning experience by incorporating real-world problems, encouraging entrepreneurship, and fostering an understanding of global business dynamics.

Alias and Matore (2023) explain that teachers should utilise numerous innovative strategies to facilitate teaching and learning since there is no "one-size fits-all in teaching". Flipped classrooms are a prime example of innovative pedagogy, where traditional classroom dynamics are inverted. Galindo-Dominguez (2021) maintain that the flipped classroom enables learners to engage with teaching resources outside of class through digital platforms, freeing up classroom time for interactive activities, discussions, and solved problems. Bishop and Verleger (2013) assert that the flipped classroom promotes active learning and allows teachers to dedicate more time to addressing individual student needs, facilitating group projects, and encouraging critical thinking. Bergmann and Sams (2012) concur that the flipped classroom ensures that learners are not passive recipients of information but active participants in their learning journey, preparing them for the collaborative and self-directed nature of the modern workplace. In corroboration, Medico et al. (2023) maintain that the introduction of digital games in teaching and learning motivates participation, engagement, and increases learners' outcomes. This shows that teachers may utilise different game features to establish subject concepts for learners. In Business Studies, gamification can be used to simulate business environments, operations, ventures, and roles, offering learners a dynamic and interactive way to learn complex concepts and strategies. The competitive and rewarding nature of games can enhance learners' motivation and encourage a deeper engagement with the subject matter.

Furthermore, Lee and Hammer (2011) acknowledge that gamification supports the development of leadership and decision-making skills as learners navigate through different levels or scenarios, making critical choices that influence outcomes. The integration of social media into educational practices is another facet of innovative pedagogy that can significantly benefit Business Studies. Platforms like Twitter, LinkedIn, and blogs can be used to connect learners with industry professionals, follow current events and trends, and participate in global business discussions. This approach not only broadens learners' perspectives but also helps them build a professional network and develop digital literacy skills. Greenhow and

Askari (2017) argue that social media can facilitate collaborative projects, peer feedback, and the sharing of resources, creating a vibrant and connected learning community.

Despite the clear benefits of innovative pedagogy, its successful implementation requires overcoming certain challenges, including teacher preparedness, access to resources, and institutional support. Teachers must be adequately trained in new pedagogical strategies and confident in their use of technology to effectively integrate these approaches into their teaching. Moreover, equitable access to digital tools and resources is essential to ensure that all learners can benefit from these innovative learning experiences. Institutional support, in terms of policies, infrastructure, and culture, plays a crucial role in fostering an environment conducive to innovative pedagogy (Ertmer & Ottenbreit-Leftwich, 2010). Despite the numerous advantages of innovative pedagogy, it's important to acknowledge the digital divide that can limit access to these learning opportunities. Learners from socioeconomically disadvantaged backgrounds may not have the same access to technology. Addressing this divide requires targeted efforts to provide all learners with the necessary tools and resources to participate fully in innovative learning experiences. This might include loan programmes for digital devices, subsidised internet access, and the creation of accessible learning materials that do not rely solely on high-bandwidth connections (Selwyn, 2017).

To maximise the benefits of innovative pedagogy, teachers and schools must embrace a culture of continuous improvement and openness to change. This includes investing in professional development for teachers, creating flexible learning spaces that accommodate new technologies and teaching methods, and fostering a school culture that values and supports innovation. Finally, innovative pedagogy in Business Studies raises the potential of technology to create engaging, personalised, and immersive learning experiences that prepare learners for the dynamic nature of the business world.

2.4 Digital tools

Johnson and Samora (2016) maintain that digital technology has become a major means to facilitate and support teaching and learning. Nurmatova et al. (2024) affirm that digital tools play a crucial role in modernising educational practices and enhancing both teaching and learning processes. In defining digital tools, Mucundanyi and Woodley (2021) conceptualise digital tools and stated that digital tools encompass a wide range of software, platforms, and

digital devices that have the potential to transform traditional classrooms into dynamic learning environments. In Business Studies, the utilisation of digital tools can facilitate the simulation of real-world business scenarios, enable access to global markets and trends, and encourage interactive and engaging learning experiences (Beeland, 2002; Hilton, 2016). Various digital resources are used by teachers to enhance instructional practice. Churchill (2017) contends that digital resources such as e-books, online databases, and specialised software provide learners with up-to-date information and practical knowledge, bridging the gap between theoretical learning and real-world application. Research has indicated that integration of digital technology in the teaching of Business Studies enables learners to master business concepts and practical experience that is essential in the business world (Sithole, 2012). Bourbour (2023) asserts that digital tools such as interactive whiteboards and projectors enhance visual learning and allow teachers to present complex business concepts and data analysis in an accessible manner. Greenhow et al. (2021) stated that digital tools support visual learning. They further indicated that the introduction of digital simulations and games in teaching and learning offers immersive learning experiences, whereby learners can experiment and witness what is happening in the world. This view suggests that digital tools not only deepen learners' understanding but also foster critical thinking in a classroom context.

In addition, Almodaires et al. (2021) contend that digital tools, such as Microsoft Teams, are suitable for online face-to-face and online learning and have become indispensable in fostering collaborative learning. They further stated that these platforms enable learners to collaborate on projects, share content, and communicate in real-time, regardless of their physical location. This collaborative approach mirrors the teamwork and networking skills vital in the business world, preparing learners for professional environments that increasingly rely on digital communication and collaboration tools (Johnson, 2020). Ahmad et al. (2015) maintained that the dawn of social media platforms has drastically changed the world by bringing people closer together. Therefore, this study maintains that social media platforms serve as valuable digital tools in education, enabling learners to engage with content, teachers, and each other in a familiar and interactive setting. As a result, teachers can leverage social media platforms to share relevant information, videos, and discussions, encouraging learners to engage with the subject matter outside the traditional classroom setting. These views suggest that social media can help teachers promote active learning in their respective classes.

The rapid advancement of technology in the world has resulted in teachers using various digital tools for easy communication with learners and to enhance teaching and learning. Social media platforms such as WhatsApp, Facebook and YouTube are used by teachers to disseminate information to learners. The next section explores the application of social media platforms such as WhatsApp, Facebook and YouTube to enhance teaching and learning.

Social Media Platforms

2.4.1 WhatsApp

WhatsApp originated in 2009, and it was established by Brian Anton and Jan Koom (Ajani & Khoalenyane, 2023). The primary objective of this instant messaging is to exchange information at a cheap rate. Oriji and Anikpo (2019, p. 20) conceptualise the notion of WhatsApp, and they describe WhatsApp as an “instant messaging application for smartphones; or a texting service application that allows users to exchange messages, send videos, written messages, photos, voice messages or voice calls via Internet connections through Blackberry, Windows Phone, iPhones, Android and Nokia phones". However, they further stated that WhatsApp required internet connectivity in order for users to exchange information accordingly. WhatsApp is a convenient digital tool that enables users to connect with a number of people simultaneously. Ajani and Khoalenyane (2023) concur that WhatsApp instant messaging enables its users to transmit and communicate various information, such as videos, text messages, and voice notes, simultaneously. Jailobaev et al. (2021) maintained that teachers utilise WhatsApp groups to promote teamwork, facilitate group discussions, and provide feedback to learners.

In the context of this study, teachers can use WhatsApp messages to download, communicate information and share resources with learners to enhance teaching and learning of business studies. Research shows that the use of WhatsApp has limitations as well. The research conducted by Songxaba and Sincuba (2019) on the effect of social media on English second-language essay writing, with special reference to WhatsApp. Findings revealed that learners use informal language to communicate and respond on WhatsApp, and some wrote numbers instead of using word abbreviations. This impacts negatively on learners' writing skills. Gcabashe and Adebola (2023) cautions that teachers should provide guidance to learners to ensure that they use WhatsApp appropriately in the classroom during the teaching and

learning period. This includes setting rules for the WhatsApp group to ensure that learners understand their roles and responsibilities pertaining to the utilisation of WhatsApp.

2.4.2 Facebook

Chugh and Ruhi (2018) maintain that Facebook is one of the most crucial social media platforms in the world and has become a global phenomenon in the educational landscape. They further highlighted that Facebook was established in 2004, specifically for college students at Harvard, for social networking. In South Africa, more than 14 million people use Facebook to share information online. This suggests that Facebook is an essential tool for easy communication. A study conducted by Raman et al. (2014) on the utilisation of Facebook as a communication and collaborative tool among secondary school learners found that Facebook provides opportunities for information sharing, networking, and constructive discussion between teachers and learners. In the context of this study, Facebook can support a learner-centred method whereby both teachers and learners participate in classroom discussion. Irwin et al. (2012) maintain that Facebook has become a cornerstone for online learning, as it provides an opportunity for teachers to interact with learners irrespective of their geographical location. This view suggests that teachers can use Facebook to post learning resources online, such as homework and class activities, to enhance learners' skills, resulting in effective teaching and learning.

2.4.3 YouTube

Globally, a large number of learners utilise digital technology for socialising and entertainment purposes. Therefore, to accommodate learners, teachers are required to apply various teaching strategies linked with digital technology to ensure that learners develop, acquire, and apply new knowledge. Al-Hammouri et.al. (2022) maintain that teachers should utilise YouTube to enhance teaching and learning in educational areas. Srinivasacharlu (2020) explain that YouTube was established in the year 2005 with the objective to share videos on online platforms. Thereafter, the site was bought and owned by Google in November 2006. YouTube videos are published by individuals and various educational institutions keep society abreast with the latest developments in the world, and most of them provide cultural and language perspectives (Al-Hammouri et.al., 2022). YouTube is a digital tool that can be used to access various information, and it is viewed as one of the biggest search engines, followed by Google. Srinivasacharlu (2020, p. 21) maintains that YouTube “allows “users to

upload, view, rate, share, add to playlists, report, comment on videos, and subscribe to other users. It also provides access to various content, such as educational videos, TV shows, music videos, and audio cassettes.

The impact of digital tools on education extends beyond the classroom; it also influences how assessments are conducted and how feedback is provided to learners. Mukazi (2022) acknowledges that digital platforms enable the creation of diverse and innovative assessment methods, such as online quizzes, interactive assignments, and digital portfolios. These tools offer immediate feedback, allowing learners to understand their learning progress in real-time and teachers to tailor their instruction to meet individual needs more effectively. The above assertion helped the researcher in this study to understand how diverse digital technology can influence the teaching and learning of Business Studies, particularly in rural secondary schools. In addition, digital assessments can incorporate a variety of media such as text and videos, providing a more comprehensive evaluation of learners' understanding and skills (Mukazi 2022). However, this shift towards digital assessment methods underscores the need for a more nuanced approach to evaluating student learning, one that values creativity, critical thinking, and practical skills alongside traditional academic knowledge (Vogt, 2016; Johnson, 2020). Furthermore, the use of digital tools in education promotes a personalised learning experience, where content and pace can be adjusted to match individual learners' needs and preferences.

The literature portrays that the integration of digital tools in education faces challenges, particularly regarding equitable access. The digital divide remains a significant barrier, with learners in underprivileged or rural areas often lacking access to reliable internet and digital devices. Warschauer (2004) argues that this disparity can hinder the effectiveness of digital learning tools and exacerbate educational inequalities in society. Therefore, efforts to integrate digital tools into education must be accompanied by initiatives to improve digital infrastructure and access for all learners. Additionally, the successful integration of digital tools in education requires teachers to possess not only technical skills but also pedagogical expertise in leveraging these tools to enhance learning (Bizami et al., 2023). Supriyadi and Kuncoro (2023) argue that professional development opportunities focusing on educational technology are crucial for teachers to stay abreast of new tools and methodologies. Such training should not only cover the technical aspects of digital tools but also include strategies

for their effective pedagogical application, ensuring that technology integration enhances rather than distracts from the learning experience (Ertmer & Ottenbreit-Leftwich, 2010).

Moreover, Vanden Abeele and Nguyen (2022) maintained that the issue of data privacy, screen time, and digital wellness has emerged as a concern in an increasingly digital learning landscape. Therefore, schools must navigate these challenges thoughtfully, ensuring that digital tools are used in ways that support learners' well-being and privacy. Developing digital citizenship among learners is crucial, teaching them to use technology responsibly, ethically, and safely. This includes understanding the implications of data sharing and recognising credible sources of information (Ajani & Gamede, 2020; Warschauer, 2004). In embracing digital tools in education, it is vital to recognise that technology is not a remedy but a tool to enhance and supplement traditional teaching and learning methods. The effectiveness of digital tools depends on their thoughtful integration into pedagogical practices, supported by adequate training for teachers and equitable access for learners. This study maintained that as we continue to navigate the digital transformation of education, the focus must remain on fostering meaningful learning experiences that prepare learners for the challenges and opportunities of the future. This requires a collaborative effort among policymakers, teachers, and communities to ensure that digital tools are leveraged in ways that advance educational equity and excellence for all learners.

2.5 Innovative approaches used by teachers to enhance teaching and learning

2.5.1 Self-directed learning

Loeng (2020) contends that the concept of self-directed learning arose in the education sector in the 1970s and is widely employed. This shows that this is a highly conceptualised concept since there is no one-size-fits-all definition in the literature. Knowles (1975) conceptualises self-directed learning as a learning method whereby individuals take responsibility for their learning in order to reach their learning goal and potential. He or she further stated that teachers can facilitate self-directed learning by providing sufficient resources and guidance to learners to achieve their learning objectives. Voskamp et al. (2022) emphasised that self-directed learning was formerly used to explain learning outside of the school settings. Therefore, during the 21st century, this approach is increasingly recognised as vital in the educational landscape, particularly in enhancing teaching and learning in various subjects,

including Business Studies. Mahlaba (2020) maintain that self-directed learning empowers learners to take control of their education. In Business Studies, self-directed learning encourages learners to explore subject content and conduct independent research projects, and also apply theoretical knowledge to practical situations. Samson (2015) argues that this approach not only enhances engagement and motivation but also helps learners to develop critical skills necessary for success in the business world, such as creative thinking and problem-solving. Moreover, self-directed learning integrates well with digital technology and online learning environments, which provide learners with easy access to a wide range of resources and tools. Therefore, learning platforms like online courses and digital libraries enable learners to understand what is happening beyond the classroom environment. However, implementing self-directed learning requires a shift from the traditional teaching practice by including innovative pedagogy in teaching. Chen et al. (2023) maintain that teachers must transition from being the sole source of knowledge to acting as facilitators or guides who support and mentor learners in their independent learning journeys. They further stated that learners get the opportunity to interact with the teacher after classes to clarify certain concepts. This shift necessitates professional development and support for teachers to develop the skills and confidence needed to promote self-directed learning effectively. Moreover, it requires creating a classroom culture that values curiosity, encourages risk-taking, and supports the exploration of new ideas (Samson, 2015).

Despite its benefits, self-directed learning also presents challenges, particularly in ensuring that all learners are equipped with the skills and motivation to engage in independent learning. Not all learners may be ready or able to manage their learning effectively without structured guidance. Therefore, it is essential for teachers to provide scaffolding and support in the early stages, to help learners develop the necessary skills for self-directed learning. This support might include teaching learners how to set realistic learning goals, select appropriate resources, and develop effective study habits (Knowles, 1975). The integration of self-directed learning within Business Studies not only caters to the development of autonomous learners but also mirrors the realities of the modern business environment, which values initiative, innovation, and the ability to learn continuously. In an era marked by rapid technological advancements and shifting market dynamics, the capacity to learn independently is invaluable. Businesses increasingly seek individuals who can adapt to new situations, learn new skills quickly, and take charge of their professional development.

Little and Williams (2010) argue that by encouraging self-directed learning, teachers can help learners to prepare them for successful careers in business. Boyer et al. (2014) maintain that self-directed learning also plays a crucial role in developing entrepreneurial skills among learners. Entrepreneurship demands a high degree of self-motivation, problem-solving, and the ability to learn from both success and failure. Rae (2005) asserts that this experiential learning process not only enhances learners' understanding of business concepts but also builds creativity and problem-solving knowledge, which is essential for any aspiring entrepreneur. Furthermore, Boyer et al. (2014) believe that self-directed learning promotes lifelong learning, which is crucial for personal and professional growth. Therefore, by instilling the principles of self-directed learning, teachers can encourage learners to view learning as an ongoing process that extends beyond formal education. However, Lawson et al. (2019) assert that the effectiveness of self-directed learning depends on learners' ability to manage their time, set achievable goals, and remain motivated without constant supervision. In concluding this section, researchers believe that self-directed learning is a powerful pedagogical approach that prepares learners for the complexities of the business world by fostering independence and a lifelong learning mindset. This suggests that as learners become more proactive in their learning, they develop not only the knowledge and skills necessary for their immediate academic success but also the qualities that will serve them throughout their careers. However, challenges related to self-directed learning can be mitigated through strategic support from teachers and the careful use of technology.

2.5.2 Flipped learning.

Wiley and Gardner (2013) assert that flipped learning is an instructional strategy and a type of blended learning that involves using technology to support teaching and learning. It also involves teachers interacting with learners instead of lecturing them. Ahmed (2016) portrays that in a flipped classroom, learners first study the topic by themselves, typically through digital platforms at their own pace and communicate with peers and teachers online if they have any questions. Thereafter, classroom time is used to deepen understanding through discussion and problem-solving activities with learners and teachers. Bergmann and Sams (2012) argue that this innovative teaching strategy facilitates a more interactive, student-centred learning environment where learners can engage actively with the material and apply concepts in practical exercises, and receive immediate feedback from their teachers. In the context of Business Studies, flipped learning allows learners to gain subject knowledge

before attending their respective classes. Therefore, in class, they just engage with high-level activities designed by teachers. For example, learners might watch types of business strategies or forms of ownership at home and then apply these concepts in class through case studies, scenarios, or presentations.

Bauer-Ramazani et al. (2016) maintain that the learning approach not only enhances learning outcomes by encouraging active participation but also allows learners to apply theoretical knowledge to real-world scenarios through innovative technology. Marshall and DeCapua (2013) contend that flipped learning also fosters collaborative learning, where learners are encouraged to work together to solve problems, discuss concepts, and share insights. From the researcher's point of view, this collaborative process can be beneficial in subjects like Business Studies, where understanding complex concepts and developing various skills, such as teamwork and communication, are crucial. By engaging in peer-to-peer teaching, learners can reinforce their understanding, gain new perspectives, and develop interpersonal skills essential for the business world. Moreover, Abeysekera and Dawson (2015) claim that the role of the teacher evolves from a disseminator of knowledge to a facilitator of learning, guiding discussions, providing clarification, and offering targeted support where needed. However, successful implementation of flipped learning requires careful planning and consideration.

Ahmed (2016) acknowledges that the creation of engaging and informative online material is crucial. This study maintains that teachers must ensure that the online content is accessible to all learners, considering varying levels of internet access and digital literacy. Moreover, learners must be adequately prepared and motivated to engage with the material independently outside of class. Furthermore, flipped learning promotes a shift in the teacher's role from the sole source of knowledge to a guide and mentor, facilitating a learning environment where learners feel supported in their learning journey. This shift encourages the development of a learning community within the classroom, where learners and teachers collaborate in the learning process. Teachers can spend more one-on-one time with learners, providing targeted feedback and addressing individual learning needs. Tucker (2012) argues that this personalised interaction can significantly enhance the learning experience, making it more meaningful and effective for learners. However, the success of the flipped classroom model also depends on learners' motivation and self-regulation. This suggests that learners

must be disciplined enough to engage with the material outside of class and come prepared to participate in classroom activities.

More importantly, teachers play a crucial role in fostering this motivation by creating engaging content, setting clear expectations, and providing ongoing support and encouragement. In support, Bergmann and Sam (2012) argue that building a classroom culture that values curiosity and collaboration can further motivate learners to take an active role in their learning. Implementing flipped learning also requires access to appropriate technology and resources for teachers in creating content and for learners in accessing it. This necessitates investment in educational technology tools and training for teachers to effectively use these tools to create engaging and informative content. Additionally, Gilboy et al. (2015) assert that ensuring that all learners have equitable access to technology is critical for the success of flipped learning. They further highlighted the need for schools and institutions to address the digital divide. In summary, flipped learning represents a significant shift in educational practice, offering a dynamic and interactive approach that places learners at the centre of their learning experience. Therefore, by incorporating technology to deliver content outside of the classroom and using class time for active learning, the flipped classroom method can significantly enhance engagement, understanding, and application of Business Studies concepts.

2.6 ICT affordances

Worldwide, teachers employ ICT to enhance teaching and learning in the classroom context. However, in this study, the question remains about the influence of diverse innovative pedagogy in teaching and learning, specifically in rural schools, where there is a shortage of resources. Therefore, this section is essential as it seeks to understand the contribution made by ICT in the education landscape and to discover how teachers employ innovative pedagogies in their respective classrooms. Gibson (1977) introduced the concept of "affordances" in his ecological approach to visual perception, which has since been adapted to understand the potential of ICT in education. According to Gibson (1977), affordances refer to the possibilities that can be offered by the environment. This suggests that the cognitive affordances of ICT, for example, can support the development of higher-order thinking skills through the use of digital technology resources. Contrary to Norman (1988, p. 9 cited in Gibson (1977) describes affordances as "the perceived and actual properties of the

thing, primarily those fundamental properties that determine just how the thing could possibly be used". This means that ICT affordances comprise various properties used to enhance teaching and learning in class. Greeno (1994) asserts that the concept of affordances in the context of ICT refers to the possibilities that technology offers for action in educational settings, enhancing teaching and learning processes.

Research conducted by Conole and Dyke (2004) examined the affordances offered by ICT tools to support effective teaching and learning. Findings showed that ICT affordances have radically transformed the educational landscape, as they can be used as a pedagogy to support educational practice. They further outline a taxonomy of ICT affordances which include accessibility, speed of change, diversity, communication, reflection, multimodal and non-linear, risk, fragility and uncertainty, immediacy, monopolisation and surveillance (Conole & Dyke, 2004). Consequently, it is essential for researchers to understand the taxonomy of ICT in supporting teaching and learning. The following section explains each taxonomy of ICT affordances, as suggested by Conole and Dyke (2004).

2.6.1 Accessibility

Seale (2006) maintains that accessibility is critical for E-learning. This aligns with the objectives of this study, as the researcher intended to understand the affordances offered by ICT in teaching and learning. Conole and Dyke (2004) articulated that ICT provide an opportunity to access massive information using various mechanisms such as online digital tools and websites. Despite the significance of accessibility, Conole and Dyke (2004) argue that accessibility to a wide range of information may result in an overload of information and a problem of quality assurance in validating information. Teachers should be careful in selecting resources for teaching and learning. Nurmatova et.al. (2024) stated that it is essential to select relevant information for learners due to the availability of multiple digital resources and to avoid overloading students with vast information. Therefore, in the context of this study, digital technologies can provide teachers with access to educational materials that might be inaccessible in traditional classroom settings, leading to improvement in subject knowledge and academic achievements. In contrast, Moll et al. (2022) argue that ICTs only provide teachers with the opportunity to select search engines that will assist them in critically evaluating information based on their operative knowledge. Moreover, the pedagogical affordances of ICT are to provide teachers with flexible and innovative ways to

design lessons and deliver subject content in a meaningful manner. Therefore, this study maintains that accessibility enables teachers to design more engaging, dynamic, and inclusive learning experiences that cater to the diverse needs of learners.

2.6.2 Speed of change

Conole and Dyke (2004) assert that the rapid speed of change in information or new technology enables us to keep abreast with what is happening around the world. This suggests that the rapid change in the speed of technology enriches teachers with an understanding of global issues and diverse perspectives around the world. Merryfield (2003) concurs that the integration of digital technologies in the curriculum can connect learners with peers and experts around the world, enabling them to exchange information. Consequently, Conole and Dyke (2004) also revealed that the changing speed of information can pose a challenge in the educational landscape to use new technologies. In this study, teachers may be frustrated in choosing an appropriate resource that will assist in enhancing the teaching and learning of Business Studies.

2.6.3 Diversity

Another significant affordances of ICT is its capacity to support experiential learning opportunities. Conole and Dyke (2004) noted that ICT affords significant opportunities to learn from other people's experiences, which is a basic ingredient for effective teaching and learning. They further indicated that experience can be shared through simulation, website and subject experts. Moll et al. (2022) affirm that diverse experiences are brought by different people using online platforms. This level of connectivity supports social learning through the sharing of experiences, which fosters a sense of community.

2.6.4 Communication and collaboration

Conole and Dyke (2004) highlighted that ICT provides opportunities for easy communication and collaboration, which allow for real-time interaction and collaboration among learners and teachers, regardless of geographical locations. This view suggests that new technology provides an opportunity for a new way of communication and reflective dialogue between people. As a result, platforms such as online discussion forums and chat rooms facilitate

online communication, making it possible for learners to participate in classroom activities, access support from teachers, and engage in peer discussions from anywhere in the world.

2.6.5 Reflection

According to Conole and Dyke (2004), ICT can facilitate self-reflection and critique the subject knowledge acquired in class. In other words, technology allows learners to reflect on their performance, identify areas for improvement, and adjust their learning strategies accordingly. Moll et al. (2022) argue that reflection requires a good teacher to recognise. Therefore, this study argues that teachers may use ICT as a pedagogy to enhance the teaching and learning of various subjects.

2.6.6 Multimodal and non-linear

Conole and Dyke (2004) maintain that technology enables learners to use different routes to achieve learning objectives, since the web is nonlinear. They further indicated that this provides learners with the opportunity to move beyond linear pathways in achieving learning goals and objectives. In contrast, Moll et al. (2018) suggested that Conole and Dyke's perspective on multimodal and non-linear ICT is insufficient, stating that ICTs cannot guarantee individual learning, but rather provide teachers with different techniques and strategies to teach various subject content. Formosinho and Pascal (2017) concur with Conole and Dyke and stated that ICT promote multimodal communication to integrate the voices of different stakeholders such as teachers, parents and learners in different ways.

2.6.7 Risk, fragility and uncertainty

Digital technology and networks change from time to time. This suggests that ICT tools have unintended consequences towards human beings (Conole & Dyke, 2004; Moll et al., 2022).

2.6.8 Immediacy

Conole and Dyke (2004) assert that the speed and flexibility of ICT made it possible to exchange information through various websites and emails, and this enables users to communicate information and receive feedback immediately. Therefore, this indicates that ICT simplify the teaching and learning process as feedback is received immediately from various search engines.

2.6.9 Monopolisation

Conole and Dyke (2004) maintain that the convergence and divergence of ICT in the world have resulted in scalability and globalisation. This view suggests that digital technology affords significant opportunities for developing teacher knowledge and lifelong learning, as knowledge is diversified due to the rapid increase in technology. Teachers and learners can work in interdependence throughout the world using digital technologies.

2.6.10 Surveillance

Conole and Dyke (2004) contend that the introduction of new technologies provides teachers with opportunities to monitor learners' activities closely than ever before. As a result, with new technology, individuals can use 'new smart' devices and personal tags, which are being included in commercial products, enabling providers to target and personalise products more accurately (Conole & Dyke, 2004, p. 120). They further articulated that technology allows individuals and other agents to use tracking devices for surveillance and monitoring purposes. ICT benefits teaching and learning in various ways. Garrison and Anderson (2003) articulated that the availability of online professional learning communities enables teachers to continually update their knowledge and skills, share best practices, and collaborate with peers globally. This ongoing professional growth is essential for teachers to effectively integrate new technologies into their teaching practices and stay abreast of pedagogical innovations.

In support of the above, ICT affords effective curriculum mediation by shaping how curriculum content is interpreted, represented and enacted in digitally mediated learning environments. Khoza (2021) argues that ICT affordances are embedded in the alignment between curriculum intentions, pedagogical practices and assessment within a digitalised curriculum. Therefore, through multimodal tools such as learning management systems, videos and interactive platforms, teachers can enhance conceptual understanding and coherence in curriculum delivery (Khoza, 2021). Similarly, La Fleur and Dlamini (2022) assert that technology-enhanced pedagogies support curriculum transformation by enabling learner-centred approaches that move beyond traditional teacher-dominated practices. As a results, these affordances allow curriculum implementation to become more responsive, flexible and contextually relevant (Khoza, 2021; La Fleur & Dlamini, 2022).

Another critical affordance of ICT is the capacity to enhance teacher's pedagogical knowledge and digital competence. Mpungose (2020) highlighted that ICT equips student teachers with essential digital pedagogical skills required for teaching in the era of the Fourth Industrial Revolution. Therefore, exposure to digital tools enables teachers to integrate content knowledge with appropriate pedagogical strategies and technological applications (Mpungose, 2020). Moreover, Mhlongo et al. (2023) further note that smart digital technologies support innovative teaching practices by enabling access to diverse instructional resources and professional learning opportunities. Together, these scholars demonstrate that ICT affords teachers opportunities to continuously develop their pedagogical practices and adapt to evolving educational demands (Mpungose, 2020; Mhlongo et al. 2023).

ICT affords learner-centred pedagogies that promote active engagement, collaboration and inclusivity in the classroom. La Fleur and Dlamini (2022) assert that technology-enhanced learning environments encourage learner autonomy and participation through interactive and inquiry-based activities. These affordances enable differentiated instruction that accommodates diverse learning needs and styles. Mpungose (2020) similarly contends that ICT-supported pedagogies foster critical thinking, creativity and collaborative learning, particularly among pre-service and in-service teachers. Therefore, by shifting the focus from content delivery to learner engagement, ICT supports inclusive and participatory pedagogical practices (La Fleur & Dlamini, 2022; Mpungose, 2020).

In addition, ICT also affords innovation and expanded access to educational opportunities, although these affordances are shaped by contextual realities. Mhlongo et al. (2023) observe that digital technologies enhance access to learning materials, communication, and flexible learning spaces, especially in under-resourced contexts. However, they caution that infrastructure limitations and uneven digital literacy can constrain the effective realisation of these affordances. Similarly, Khoza (2021) argue that the success of ICT integration depends on how well digital tools are aligned with pedagogical intentions and curriculum goals. When ICT is strategically implemented, it can support sustainable innovation in teaching and learning despite contextual challenges (Mhlongo et al., 2023; Khoza, 2021).

Despite the numerous benefits associated with ICT affordances in education, challenges related to digital equity, promoting digital literacy, accessibility of ICT in different contexts, and the digital divide persist. Warschauer and Matuchniak (2010) highlight the need for equitable access to digital technologies and high-quality internet connectivity as a prerequisite for leveraging ICT affordances effectively. Therefore, in this study, the researcher believes that addressing this challenge requires collective efforts from policymakers, teachers, and communities to ensure that all learners, regardless of their socioeconomic background, have the opportunity to benefit from digital learning environments. This view suggests that understanding the potential of ICT affordances in enhancing teaching and learning is essential to foster a culture of digital competence among teachers. This is also supported by Mishra and Koehler (2006), who argue that teachers must possess not only technical skills but also pedagogical knowledge to integrate ICT effectively into their teaching practices. This emphasises the importance of professional development programmes to equip teachers with sufficient skills to select and utilise digital tools in ways that align with learning objectives and enhance learners' achievements. Generally, the affordances of ICT in education offer unparalleled opportunities to enrich teaching and learning, foster global connections, and prepare learners for the challenges of the 21st century.

2.7 Local and International perspectives on ICT integration

Local and international perspectives on ICT integration in education highlight the global movement towards incorporating technology to enhance teaching and learning. Van der Vlies (2020) noted that various countries around the world are increasingly recognising the importance of ICT in preparing learners for a digital future. The chosen locations include a range of economic, cultural, and infrastructural circumstances, providing a thorough examination of worldwide patterns and specific variations in the use of ICT in education. Machmud et al. (2021) noted that in 2018, the Singapore government spent more than 12.8 billion Singapore dollars to improve the education system in the country. Natarajan et al. (2021) conducted a research on the integration of ICT in the Singapore education system, aiming to review the implementation of the Master Plan for ICT integration in schools.Findings show that in Singapore, the Ministry of Education has established a Masterplan for technology in education, which has set a foundation for the integration of technology in the curriculum across all schools' levels in the country. Natarajan et al. (2021)

further maintained that four Masterplan programmes have been rolled out into four phases to promote integration of ICT in the curriculum. Machmud et al. (2021) indicated that the first master plan was established to build a basis for educational technology in the country, and the primary objective of this master plan was to provide schools with ICT infrastructure and to train teachers to integrate technology in delivering the curriculum. Lee and Koh (2008) concur that the first Masterplan assisted teachers to acquire basic competencies on how to integrate ICT for teaching and learning. In supporting this discussion, Kong et al. (2014) affirm that the first Masterplan was established to capacitate primary and secondary school teachers with ICT pedagogical skills, such as word processing, internet usage and the use of ICT digital tools. This information shows that teachers have been trained in Singapore to build technical knowledge and to enhance instructional practice. Thereafter, the second Master plan was established between 2003 and 2008, which is known as "Seeding innovation in schools". Kong et al. (2014) stated that the second master plan was established to develop alternative pedagogies and to encourage teachers to use innovative ICT pedagogy for effective teaching and learning in daily learning.

Moreover, to strengthen the progress of integration of technology in Singapore schools, the third Master plan was established between 2009 and 2014. Kong et al. (2014) maintained that the third master plan was established to promote self-directed learning competencies among learners. This promotes opportunity for deeper learning as student have access to school information regardless of their geographical location in the country. Finally, the fourth masterplan was established to ensure that all learners in the country are prepared to use digital technology for effective learning and to ensure that teachers design lessons using technology (Kong et al., 2014).

Despite these advances, Singaporean teachers continue to struggle with the incorporation of ICT into their methodologies. There is a huge problem known as the digital divide, which occurs when learners who come from families with lower socioeconomic status may not have access to the essential technical gadgets and internet connection at their homes. This gap may make it more difficult for these pupils to benefit from learning that is centred on ICT. Teachers have also voiced their worries over the steep learning curve that is involved with mastering new technologies and the amount of time that is necessary to construct lesson plans that are improved by information and communication technology.

In contrast, Finland, known for its exemplary education system, adopts a more balanced approach to ICT integration. The Finnish National Agency for Education emphasises the thoughtful use of technology, advocating for its integration in ways that support active learning and pedagogical goals. Finnish education policy encourages teachers to use ICT to foster collaborative learning environments, enhance student engagement, and provide access to diverse learning resources. The focus is on enhancing the quality of education through technology, rather than technology being an end in itself (Kumpulainen, 2014). In developed countries, the focus has been on updating existing digital infrastructures within educational sectors. For example, in countries such as Finland and Singapore, research indicates that there are advanced ICT integration models in schools and technology is being incorporated into the curriculum to improve teaching and learning. These models are not just about the use of technology but also about the development of critical thinking, creativity, and collaborative skills (Niemi & Multisilta, 2016). Moreover, a study conducted by Nidup (2018) in Asia indicated that countries such as Japan, Singapore, Brunei, and the Republic of Korea have the highest ICT infrastructure and are categorised as advanced digital societies in Asia. Therefore, this suggests that technology is being incorporated for effective teaching and learning in some of the Asian countries. Further to the above, a study conducted by Jelyani, Janfaza and Soori (2014) on the integration of smart boards in EFL classrooms revealed that in countries like the United Kingdom and the United States, smart boards help learners acquire different knowledge to accommodate their learning needs. To ensure that all schools in the United Kingdom have access to digital tools and resources, significant investments have been made in ICT infrastructure.

Contrastingly, in many developing countries like Africa, the challenges related to ICT integration in education continue to rise. These challenges include limited access to technology, inadequate internet connectivity, and a lack of proper training for teachers in using ICT tools effectively in teaching (Adediran, Adedeji, Nwosu, Nwugo & Nnamani, 2023). For example, studies conducted in South Africa highlight significant infrastructural and socioeconomic challenges, particularly in rural areas. These challenges hinder the effective integration of ICT in education, with issues such as limited access to computers and the internet, unreliable power supply, and insufficient teacher training in ICT use being prevalent (Maphalala et al., 2022).

Moreover, the literature indicates that there is a gap between policy and practice in the integration of ICT in education in many developing countries. Selwyn (2018) argues that numerous policies and initiatives aim to promote the use of ICT in education, but their implementation often falls short due to various barriers. These barriers include not only infrastructural and economic constraints but also resistance to change among teachers, lack of pedagogical innovation, and inadequate support systems for ICT integration (Selwyn, 2018). The difference in ICT integration between urban and rural areas is another crucial aspect highlighted in the literature. In many countries, urban schools tend to have better access to digital tools and resources compared to their rural counterparts (Warschauer, 2004; Dzansi & Amedzo, 2014; Maphalala et al., 2022). Due to differences in the global landscape, there is a gap in understanding how ICT integration can be effectively implemented in specific educational contexts, especially in subjects like Business Studies. Next, there is a large literature on the benefits and challenges of ICT in education. However, there is limited research on its application in specific subjects and educational settings. Thus, this study aims to address this gap by exploring the integration of ICT in the teaching of Business Studies, particularly in the context of rural schools in South Africa. The study seeks to understand how teachers apply innovative pedagogy to enhance teaching and learning, as well as the challenges they face, and the support systems required for effective integration.

In concluding this section, the international landscape of ICT integration in education presents a diverse picture, with each country navigating its path based on its unique context, challenges, and opportunities. While developed countries may focus on enhancing pedagogical practices and fostering innovative learning environments through technology, developing countries often prioritise overcoming access barriers and using ICT to reach underserved populations. This global perspective underscores the multifaceted role of ICT in education, serving not only as a tool for enhancing teaching and learning but also as a means of promoting equity and access to education worldwide.

2.8 Business Studies in the South African context

Since 1994, curriculum restructuring has been implemented in the South African education system to address inequalities, racism and discrimination that occurred previously. The introduction of the National Curriculum Statement (NCS, 2006) in Further Education and Training (FET) band resulted in changes in subjects' names and content in the FET Phase to

reach international trends. Thereafter, Business Studies was born in the year 2006 to replace Business Economics, and it was introduced as a non-compulsory subject to all secondary schools in South Africa (North, 2002). According to the CAPS, "Business Studies deals with the knowledge, skills, attitudes, and values critical for informed, productive, ethical and responsible participation in the formal and informal economic sectors" (DBE, 2012). Therefore, the integration of ICT and the application of innovative pedagogies are necessary in this critical subject.

America and Skelly (2021) pointed out that the Business Studies curriculum comprises four crucial main topics: business environments, business operations, business roles, and business ventures. These topics require critical thinking to understand specific businesses. Therefore, since this subject deals with the dynamics of the current business environment and practices, the integration of technology in its pedagogy is not just beneficial to learners but necessary for knowledge development. In supporting this view, Mason and Rennie (2008) portrayed that the business world depends on technology for its operation, and this demands Business Studies teachers to acquire skills that are relevant and applicable in today's technologically driven business.

Moreover, the nature of Business Studies forces teachers to make use of various digital tools to keep abreast with the demands of the subject content and latest developments. Therefore, the use of digital tools in Business Studies helps to facilitate collaborative learning. In addition, Ertmer and Ottenbreit-Leftwich (2010) argue that there is a need for teachers to be proficient not only in the subject content of Business Studies but also in the use of technological tools in the classroom environment. In light of the above considerations, there is a gap in understanding how ICT and innovative pedagogies are being implemented in the teaching of Business Studies, especially in contexts that are challenged by resource limitations, such as rural schools in South Africa.

2.9 Barrier to ICT integration

One of the primary barriers to ICT integration in education is the issue of access and infrastructure. Despite the rapid advancement of technology, there is a challenge of digital divide between and within countries, with inequalities in access to reliable internet and modern computing devices. This gap hinders the ability of teachers and learners to utilise

digital resources fully, especially in rural areas where there are shortages of resources. Alemu (2015) contend that without the necessary technological infrastructure, the efforts to integrate ICT into teaching and learning remain as challenging as they leave many learners without the benefits of educational technology. In South Africa, several studies have been conducted to review the barriers to ICT integration in schools, and the findings indicate that schools fail to integrate technology effectively due to various reasons. A study conducted by Chisango and Lesame (2017) examined the challenges related to the implementation of ICT policy in rural South Africa. Findings indicate that teachers did not integrate ICT effectively in the classroom due to a lack of basic ICT knowledge; some teachers lack accessibility to ICT resources, which affects the successful integration of ICT; teachers lack sufficient knowledge to use ICT resources, and they are regarded as illiterate; and they lack sufficient funds to purchase ICT resources.

Furthermore, teacher readiness and professional development are other critical barriers to effective ICT integration in schools. This view highlights that the majority of teachers lack adequate skills and confidence to incorporate technology into their teaching practices effectively. Ertmer and Ottenbreit-Leftwich (2010) argue that even when technology is available, teachers' beliefs about teaching and learning and their comfort level with new technologies can impede its use in the classroom. Therefore, providing ongoing professional development that addresses both the technical and pedagogical aspects of ICT use is essential for enabling teachers to integrate technology meaningfully into their instruction. Another significant barrier is the lack of pedagogical support for ICT integration. As stated in previous paragraphs, incorporating technology into education requires more than just access to digital tools; it fosters a clear understanding of how digital tools can enhance learning outcomes and the development of curricula that effectively leverage technology. This suggests that teachers should understand how technology should be conceptualised in the curriculum in schools. Ng'ambi (2013) pointed out that, without sufficient pedagogical technology, ICT integration can be just used as teaching resources instead of being a transformative element for effective teaching and learning.

Furthermore, resistance to change within the education system also poses a challenge to ICT integration in South African schools. This suggests that traditional educational practices make it difficult to implement new technologies and teaching methodologies in the classroom. Rogers (2003) contends that people need to understand that change will make a difference;

otherwise, they will resist change. Overcoming this barrier requires leadership and a collective effort to foster an organisational culture that values and supports technological innovation and risk-taking. The cost of technology implementation and maintenance is another barrier to ICT integration. The initial investment in hardware, software, and infrastructure, along with ongoing costs for maintenance and updates, can be a barrier for many institutions, particularly where there is a shortage of resources. Bulman and Fairlie (2016) highlighted that securing sustainable funding for ICT projects is a critical challenge that can impact the longevity and success of technology integration initiatives.

Moreover, concerns about equity and inclusivity in ICT integration must be addressed. Technology has the potential to enhance learning for all learners, but it must be used with careful consideration of diverse needs and barriers to accessibility. This suggests that ICT can contribute to inequalities in schools. For example, learners with disabilities may require specialised technologies to fully participate in digital learning environments. Fuglerud (2014) emphasises the importance of designing inclusive ICT strategies that ensure all learners can benefit from technology-enhanced education. Next, issues of privacy, security, and ethical use of technology in education cannot be overlooked. As digital tools become more integrated into teaching and learning, protecting learners' data and ensuring the ethical use of educational technologies is crucial. To support this view, Davis and Flowers (2013) maintained that teachers and policymakers must consider these concerns thoughtfully to maintain trust and uphold the rights of all stakeholders in the digital education ecosystem.

The rapid evolution of technology itself presents a unique barrier to ICT integration, characterised by the continuous need to update both hardware and software to keep pace with technological advancements. Schools and educational institutions often struggle with the cycle of obsolescence, where purchased technologies become outdated within a few years, necessitating further investment. This constant need for updates can strain budgets and lead to inconsistencies in the availability of technology across different classrooms and schools. Bates (2015) argues that the dynamic nature of technology requires not just initial investment but also a long-term financial commitment to ensure that educational institutions can sustainably integrate ICT into their curricula. Cultural attitudes towards technology in education can also serve as a barrier to ICT integration. In some communities, there is doubt about the value of digital learning tools compared to traditional teaching methods. This doubtfulness can cause the fear that technology might replace the teacher's role in the

learning process. Selwyn (2016) notes that overcoming these cultural barriers requires demonstrating the pedagogical value of technology, not just as a tool for delivering content, but as a means to facilitate deeper learning, critical thinking, and creativity among learners.

Furthermore, the design and usability of educational technologies can significantly impact their effectiveness in the classroom. Technologies that are not user-friendly or do not align with educational goals can frustrate teachers and learners, undermining their potential benefits. Laurillard (2008) portrayed that the development of ICT tools for education should involve teachers in the design process to ensure that these tools meet pedagogical needs and are intuitive for both teachers and learners to use. Therefore, this suggests that this approach can help mitigate the barrier posed by poorly designed educational technologies. The integration of ICT in education also demands good administrative skills from teachers. To exemplify, the traditional method of recording or capturing marks may no longer be effective if teachers lack sufficient technological skills to enter the marks. In the context of rural secondary schools in the Harry Gwala District, the integration of digital tools into teaching and learning is influenced not only by teacher preparedness and innovative pedagogical practices but also by infrastructural and socio-economic disparities among schools and learners. The digital divide is the major gap between those who have reliable access to digital technologies and the internet and those who do not poses a significant challenge to the equitable implementation of digitally-enhanced pedagogy. Learners in under resourced schools often face limited access to devices, connectivity and digital literacy support, which can affect their engagement and learning outcomes. Understanding the influence of the digital divide was therefore crucial in exploring how teachers integrate digital technology to enhance innovative teaching practices in Business Studies.

The barriers to ICT integration in education are complex, as they encompass issues of access and infrastructure, teacher readiness, cultural attitudes, technology design and usability and teacher administrative skills. Therefore, addressing these barriers requires a holistic and collaborative approach that engages all stakeholders in the educational ecosystem. By acknowledging and strategically addressing these challenges, educational institutions can harness the transformative potential of ICT to enrich teaching and learning experiences for all learners.

2.10 Gap in the literature

The literature reveals that while a considerable body of research has examined ICT integration within the South African education context, the majority of these studies adopt a broad and generic focus. Existing scholarship has largely centred on teachers' perceptions of ICT in teaching and learning, the role of ICT in supporting classroom practices, barriers to integration, the digital divide, and professional development initiatives aimed at enhancing teachers' technological skills (Nasution, 2019; Nhlumayo, 2022; Gcabashe & Ndlovu, 2022; Dlamini & Mbatha, 2018; 2019; Tshelane, 2017). While these contributions are valuable, they do not sufficiently address subject-specific contexts where the pedagogical affordances of digital tools may vary significantly. Recent studies further underscore the persistence of the digital divide, which continues to marginalise teachers in under-resourced and rural schools, limiting their access to and adoption of innovative digital pedagogies (Makumane & Mpungose, 2022). Moreover, although numerous professional development programmes have been introduced to support ICT integration, these interventions remain largely generic in design, neglecting the nuanced requirements of subject-specific teaching and learning (Dimba, 2023; Mafojane, 2021).

Within this context, the integration of digital pedagogy into Business Studies, particularly at the Grade 12 level, has received limited scholarly attention. This oversight is significant given the subject's role in preparing learners for higher education, entrepreneurship, and participation in a technology-driven economy. The absence of empirical research into how innovative digital pedagogies are being implemented in Business Studies classrooms highlights a critical gap in both knowledge and practice.

This study, therefore, positions itself as a necessary response to these gaps. It seeks to explore how Grade 12 Business Studies teachers integrate innovative digital pedagogies into their teaching, with a view to identifying both opportunities and challenges. In doing so, it aims to extend the discourse beyond generic ICT integration and contribute nuanced, subject-specific insights that can inform pedagogy, professional development, and policy within the South African schooling context.

2.11 Conclusion

This chapter focused on a literature review that assisted in achieving the purpose and objectives of this study, which was to explore the diverse pedagogical approaches employed by teachers in integrating digital technologies into Business Studies lessons and the variations in these approaches across different rural school settings in Harry Gwala District. In this chapter, I began by conceptualising pedagogy, followed by a discussion on educational technology. Next, I discussed innovative pedagogical strategies, as well as the importance of digital tools to enhance teaching and learning processes. Thereafter, the chapter discussed methods used by teachers to enhance teaching and learning and also outlines how ICT affordances enhance teaching and learning of Business Studies. Next, I reviewed local and international perspectives on ICT integration, and this was followed by reviewing the teaching of Business Studies in the South African context. Lastly, I discussed barriers to ICT integration in school, including technology accessibility, teacher readiness, cultural attitude and teacher administrative experience. Literature review assisted in identifying gaps in the existing knowledge and highlighting the theoretical and practical implications of findings for teachers in rural South African contexts. The following chapter describes the theoretical framework that was used to analyse data generated from participants.

Chapter 3
Theoretical Framework

3.1 Introduction

The preceding chapter presented a local and international literature review about diverse pedagogical approaches employed by teachers in integrating digital technologies in teaching Business Studies, as well as the variations of these approaches across different rural school settings. The purpose of this chapter was to present a theoretical framework that supported the study of enhancing collaborative learning and engagement through innovative digital pedagogy in Grade 12 Business Studies. Merriam (2009, p. 66) describes theoretical frameworks as "the underlying structure, the scaffolding or frame of your study. It is the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs research". This view suggests that a theoretical framework is essential to guide the study that is being explored. Moreover, Sunday (2016) asserts that the theoretical framework encompasses the study of knowledge, findings and methodological contributions made by various researchers based on a particular study. Swanson and Chermack (2013) contend that a theoretical framework is incorporated in a research study with the purpose of explaining and predicting phenomena, as well as challenges existing in human knowledge based on planned support. On the Other hand, Adom et al. (2018) argue that a theoretical framework is important in a research study because it makes the study findings more meaningful and also provides an opportunity for empiricism. This study was underpinned by two major theoretical frameworks as a theoretical lens through which the complexities of integrating technology into pedagogy can be understood and navigated. This comprises Conversational Theory by Pask (1976) and Laurillard (2002), as well as Engagement Theory by Kearsley and Shneiderman (1998). Moreover, this section gives a brief history and overview of each theory, followed by a description of the basic principles of two theories. This section concludes by outlining the application of the theoretical framework to enhance digital pedagogy in teaching Grade 12 Business Studies. Through the integration of these theories, this section gives an inclusive understanding of how digital pedagogy can be used to craft an inclusive interactive learning experience that improves both academic performance and prepares learners for the business world's technologically collaborative environment.

3.2 Conversational Theory

3.2.1 History and background of Conversational Theory

According to Brown (2003), Conversational theory originated from the work of Gordon Pask (1976) within the cybernetics and educational psychology domain. Thereafter, the theory was supported by different scholars who advocate a similar conception, including Scott (1993) and Laurillard (1993, 2002, 2008). Pask (1976) contends that Conversational theory was developed to explain how learning occurs through conversation. He further conducted research on systems as a way of examining how they learn and adapt to meet the human learning mechanisms, which he studied through dialogical processes. Furthermore, Pask (1976) argued that learning is essentially a conversational process whereby understanding is built upon through numerous iterations of exchanges between participants. This view suggests that Conversational Theory's foundation lies in the concept of "conversation" being treated as a negotiation process. Pask (1975) maintains that there are two types of conversation, namely "teaching conversation" and "learning conversation." Pask (1975) contends that in teaching conversation, the instructor guides learners through a series of dialogues, helping them to grasp new concepts and apply them. During a learning conversation, learners are inquisitive, asking questions and seeking clarification while developing their own comprehension. This creates an opportunity for information flow and feedback through conversations, which is crucial for co-constructing knowledge.

Accordingly, Conversational Theory became popular and widespread in the education field in 1993 after the seminal work of Laurillard. This scholar relates Conversational Theory to learning with technology, and she further argues that technology can be used to teach various subjects and topics at different levels of education (Laurillard, 2002). This theory offers a comprehensive approach for understanding and integrating technology in education effectively. As stated in previous paragraphs, this framework was built on Pask's (1976) notion of the conversational model of learning by adding a technological dimension, recognising that teachers need to integrate technology to design effective teaching and learning experiences (Laurillard 2002). Moreover, this view suggests that Conversational Theory keeps evolving as it is widely used in different educational settings, such as classroom contexts and online learning environments.

In the past two decades, Conversational Theory has been reconsidered in the context of new technological changes and educational needs. This has allowed for a wider implementation of Pask's (1975) ideas due to the growing use of digital technology, including digital tools, online learning and blended learning platforms. Wegerif (2007) pointed out that educational technologies, such as intelligent tutoring systems and virtual learning environments, are underpinned by most elements of Conversational theory, which help to facilitate interactive adaptive learning. On the other hand, Laurillard (2002) argue that digital tools provide a possibility to achieve responsive conversations, making it possible to have personalised learning paths and promoting engagement through dialogue.

3.2.2 Principles of Conversational Theory

Since the 1970s, when Gordon Pask first came up with his Conversational Theory, one way or another, it has been centred on dialogue-based principles revolving around instructional processes. One basic aspect stemming from these theories is that learning comes about through conversational dynamics between two people. Pask (1975) proposed that learning is not just passive receiving information but an active, constructive, iterative exchange between individuals. This suggests that there should be dialogical transactions between learners and teachers. Through this principle, there is emphasis on complete involvement during the education period.

The second principle is "teach back", which forms one of the key components in Conversational Theory. Pask (1975) maintains that learners get the opportunity to explain what they comprehend from their discussions to either teachers or fellow learners, thus proving their knowledge level. This method is nothing more than a realisation or practice that ensures understanding is internalised enough to be articulated in words. Teach-back sessions reinforce learners' understanding and provide instructors with insights into their cognitive processes and misconceptions (Pask, 1975). This continuous process of teaching is supported by the constructivist philosophy that encourages active learning and ongoing assessment.

The third principle of Conversational Theory is "Agreement". According to Pask (1975), effective learning occurs only when both participants understand each other perfectly well. In this way, there should be a negotiated agreement between the learner and teacher on what they know about a particular subject. This implies that knowledge is socially constructed

through collaborative efforts rather than passed down from one person to another (Pask, 1976). This view suggests that building mutual agreement ensures that education is meaningful as it relates to learners' background experience. The fourth principle of Conversational Theory is "cognitive flexibility" in some principles. Pask (1975) asserts that effective learning requires one to change the way they approach problems and restructure their understanding when new information is available. This principle is important, especially in the world today, where there are rapid changes going on, and adaptive thinking is necessary for adaptation. Pask (1980) contends that through dialogues, learners can develop critical and adaptive thinking capabilities.

The fifth principle of Conversational Theory is "interaction of actors", which clarifies how the learner interacts with the instructional system dynamically (Pask 1975). According to Pask (1975), the learning process must involve active dialogue between the student and the computer programme, where it reacts to the student's input, giving feedback that directs further learning activities. This principle aims at ensuring that the learning experience becomes responsive to learners' needs, hence motivating them while promoting engagement at all times possible. Modern educational technologies such as adaptive learning systems or intelligent tutoring programmes are examples of these ideas, which use algorithms for customised content delivery based on performance (Laurillard, 2002). Such systems utilise algorithms which adjust based on content and feedback depending on how well an individual learner has performed, thereby creating unique paths for every person who uses it.

The sixth principle of Conversational Theory is representational diversity. Pask (1975) argued that learning is improved by providing information in different ways, such as through text, diagrams, and interactive models. This variety of representation helps learners understand complex concepts, as it provides alternative means for understanding and interacting with the material. Conversations which vary in terms of the forms of representation allow learners to identify linkages amongst diverse information types and acquire more nuanced and flexible insights (Pask, 1980). This principle complements multimodal learning, where the use of several modes of presentation may enhance understanding and retention. Pask (1975) pointed out that Conversational Theory also emphasised the representational diversity that relates to the dynamic interaction between the learner and instructional system. He further suggested that designing education systems in such a way that an interactive dialogue takes place between learners and a computer

programme; thus, it reacts to the user input by offering feedback, initiating further studies. This suggests that the technology guarantees that any learning context will be responsive enough to meet learners' demands, hence engaging them as much as possible. Laurillard (2002) supported this idea and stated that some of the modern educational technologies may include adaptive learning systems or intelligent tutor programmes.

Another principle of Conversational Theory is “Recursive feedback loops”. According to Pask (1975), conversation is essential in refining knowledge as it contributes to the ongoing learning process. This involves repeating sequences such as action-feedback-reflection-adaptation, which allows learners to build up their knowledge continuously (Mortimer & Scott 2003). Pask (1976) contends that recursive feedback loops ensure that learning is not static but dynamic, thus becoming a part rather than a hindrance to mistakes and misunderstandings. Therefore, such principles call our focus to formative assessments during continuous feedback while obtaining skills from coursework.

Conversational Theory places a critical priority on learner autonomy. Pask (1975) opined that learners should actively participate in their learning, taking personal ownership of it as well as through self-directed inquiry. Therefore, Conversations should empower learners, allow them to ask questions based on their interests and look for new information. This approach entails the promotion of intrinsic motivation and a sense of control over the process of learning, which is pivotal in ensuring continued engagement and lifelong learning (Pask, 1980).

This study maintains that learner autonomy is consistent with current teaching practices characterised by student-centred learning and fostering self-regulating learners. Contextualization is another principle outlined in Conversational Theory. Pask (1975) suggested that meaningful contexts were the most suitable environments for effective learning. Talking about things from new information regarding one’s experiences or real-life situations helps to make sense out of these contexts, thus making it easier to learn and remember them. This principle lends itself more to practical disciplines like Business Studies, where theoretical content needs to be linked to real-life situations (Scott, 2001). The above suggests that contextualisation enables learners to perceive what they are studying as relevant while helping them use knowledge gained in a meaningful manner.

To sum up, Conversational Theory shows that education should be interactive as it takes place in a dynamic and social manner. Learners form and improve their cognitive flexibility, autonomy, and ability to interconnect concepts in meaningful ways via dialogue with peers and feedback on their ideas. Therefore, these principles provide a solid foundation for developing engaging, personalised and effective learning experiences. Focusing on active engagement, iterative feedback loops, as well as co-constructing knowledge bases, are among customised educational models germinating from this theory, which can lead to deep understanding of information across learning settings. Figure 3.1 below illustrate conversational theory.

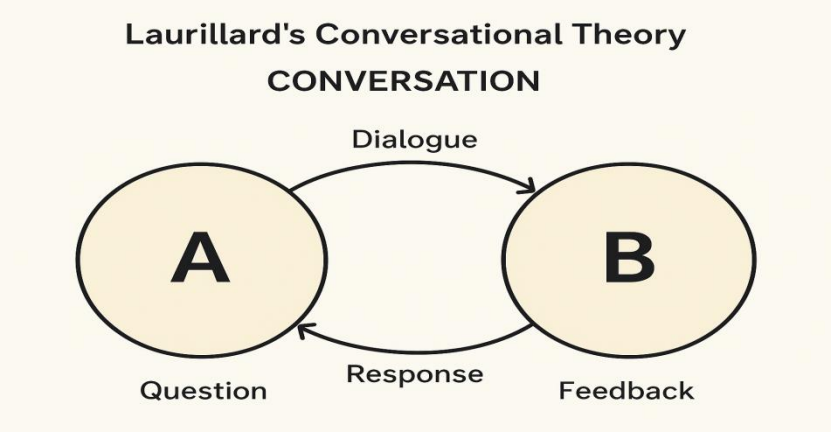


Figure 3.1 Conversational theory adopted from (Laurillard's 2002)

3.2.3 Operationalising conversational theory in the study

Digital pedagogy, which focuses on learner-centred environments using technology, can be enhanced through the principles of Conversational Theory (Laurillard, 2002). This suggests that digital pedagogy is a form of teaching in which interactive and technological tools are used to develop a stimulated learning environment assisted by the conceptual framework provided by Conversational Theory. Laurillard (2002) maintains that one of its applications is in the use of online discussion and collaborative platforms that encourage continuous interaction among learners through dynamic conversations. Applying Conversational Theory to digital pedagogy involves creating opportunities for synchronous and asynchronous conversations. Synchronous tools, such as video conferencing and live chat, allow for immediate interaction and feedback, thus maintaining the flow of conversation among participants and leading to mutual understanding (Laurillard, 2002). On the other hand,

Asynchronous tools like discussion boards and collaborative documents enable reflection and deeper engagement with the material because learners can take time to structure their thoughts and respond appropriately (Laurillard, 2002). Therefore, combining both synchronous and asynchronous interactions aligns with Pask's (1976) principle of recursive feedback loops, where learners repeatedly discuss issues at different levels, enhancing their understanding.

Conversational Theory has special relevance for Business Studies, where digital simulations and role-playing exercises can be highly effective. In these interactive tasks, learners act out real-life business situations such as decision making, negotiating with colleagues or reflecting upon outcomes. To exemplify, a virtual company management simulation game whereby learners will have an opportunity to collaborate so that they may develop strategies aimed at solving problems, in addition to adapting them according to changes that occur in market conditions. In order for this conversational principle to apply, learners must conduct teach-back sessions or elucidate their methods before obtaining criticism from group members, which gives them an opportunity to improve their work based on comments from peers (Alavi & Gallupe, 2003). Incorporating the principle of representational diversity in digital pedagogy is possible through multimedia resources. This may include videos, social media platforms, and virtual whiteboards that present information in different formats to suit individual learners' learning styles. For example, in a video case study that includes analysis by learners using an online whiteboard, they can then discuss their findings on the same. In this way, learners are able to see how different pieces of information fit together and how they can be manipulated for more flexible understanding (Pask, 1980).

A wider perspective, which promotes cognitive flexibility, is also consistent with the application of digital pedagogy. There are numerous sources, including online databases, academic journals and business magazines, that learners can consult as they seek to expand their knowledge base. Therefore, encouraging learners to read widely helps them develop critical thinking abilities because they have to adapt their thinking based on new evidence. This is essential in subjects like Business Studies because it involves analysing complex and unstable commercial environments (Downes, 2007). In digital pedagogy, the use of digital technologies can be linked to Conversational Theory. The use of digital tools also supports learner autonomy, considering its significance as a key principle according to conversational theory.

Furthermore, distance learning platforms make it possible for learners to access a wide range of learning materials, submit assignments, or engage with their colleagues at their own convenience. Essentially, this allows learners to have some control over their studies, meaning that they are able to manage their own workloads and do things they are interested in; thus creating ownership within themselves. For instance, in Business Studies, there might be alternative projects, presentations and case studies designed around particular career goals of the learners so that they are able to customise what is taught to meet their needs (Laurillard, 2002). Moreover, contextualisation is another important pillar in digital pedagogy identified by the Conversational Theory. Therefore, Business Studies teachers can employ real-world case studies, like industry partnerships and project-based learning, for this purpose. Online platforms can assist teachers in accessing updated business information and collaboration opportunities with professionals from different disciplines.

This researcher believed that applying Conversational Theory in digital pedagogy presents significant opportunities for enhancing collaborative learning and learner engagement across subjects, including Business Studies. Besides, this researcher felt that Conversational Theory is incomplete, since learning is more meaningful when learners actively engage in collaborative classroom discussions. As a result, Engagement Theory by Kearsley and Shneiderman (1998) was invited to provide further description. In support, Neo et al. (2013) stated that learners' engagement is essential to strengthen face-to-face classroom teaching, and virtual activities should be integrated. They further note that virtual platforms, such as social networking sites like Facebook, Twitter, and MySpace, can enhance learner engagement. The following section discusses Engagement Theory, as proposed by Kearsley and Shneiderman (1998)

3.3 Engagement Theory

3.3.1 History and background of Engagement Theory

Engagement Theory was formulated by Greg Kearsley and Ben Shneiderman in the late 1990s as an outgrowth of the changing educational environment influenced by advancements in digital technology. Thereafter, this concept became popular when there was a shift towards using technology as a tool for improving engagement among learners who are learning. The work of Kearsley and Shneiderman (1998) built on earlier theories of education that emphasised active learning, student motivation, and the role of interaction in learning. Their

focus is not on technology as a delivery system but rather on being able to use it to get learners involved in collaborative project-based activities. Therefore, engagement theory has its roots in early pedagogical frameworks, which stressed the importance of involvement in effective instruction.

According to Dewey (1986), an influential educational philosopher, learning should be dynamic and not passive, involving real-world problems and solving them together with classmates. This scholar further emphasises on student-centred learning approaches and points out that deep understanding and critical thinking skills can only be developed through engagement. With this basis, Kearsley and Shneiderman (1998) combined ancient concepts with current ideas from cognitive psychology and instructional design to determine how best learners could be engaged in collaboration or project-based activities through technology-based learning. As a result, the late 20th century saw a growing realisation of the potential for digital tools to modify education. Bernacki et al. (2020) assert that technology-based learning may include video conferencing, the internet, and mobile devices that can assist in facilitating learning and communication through engagement.

Moreover, the introduction of personal computers, the Internet and multimedia tools provided new opportunities for interactive and engaging learning experiences. With this in mind, researchers explored how these technologies might help boost learners' engagement and motivation. In developing their Engagement Theory against this scenario of intrinsic motivation, Kearsley and Shneiderman (1998) stated that learners should connect with learning activities through collaboration with others and through designing meaningful tasks. Webster and Ho (1997) argue that teachers should incorporate multimedia presentations to engage with learners and ensure that there is effective learning in the classroom context. To support the above, Salvo (2002) maintains that teachers should keep learners engaged through the use of technology in the classroom. One major influence on the development of Engagement Theory was constructivism and situated learning, which suggests that people build their own knowledge by interacting with others who are, in turn, engaged with subject content (Kearsley & Shneiderman, 1998). The theory aligns with Vygotsky's (1978) Social Constructivism and Situated Learning Theory, as proposed by Lave and Wenger (1991). With reference to the above, Kearsley and Shneiderman (1998) integrated the ideas into their theoretical framework, asserting that engagement could best be promoted through

collaborative assignments requiring learners to work together and communicate, among other things.

The concept ‘Relate-Create-Donate’ summarises the underlying principles behind Engagement Theory. This model argues for collaboration as a relevant component of learning tasks (Relate), production of real artefacts (Create), and real-world use (Donate) (Kearsley & Shneiderman, 1998). Relate gives much importance to social interaction and teamwork during the learning process. Kearsley and Shneiderman (1998) maintain that collaboratively working enables learners to share ideas and opinions while enhancing their understanding through feedback. The development of Engagement Theory also coincided with the increasing emphasis on 21st-century skills in education. As economies moved from manufacturing to knowledge-based industries, there is an understanding that learners need to acquire critical thinking skills and abilities such as problem-solving, communication and digital literacy. Therefore, in a classroom context, engagement theory could assist teachers in designing lessons that not only focus on subject matter but also foster the acquisition of other necessary skills.

The theory gained popularity during the early 2000s as digital technologies became more widely used in educational institutions. With the rise of e-learning platforms, learning management systems and digital collaboration tools, there are further opportunities for Engagement Theory principles implementation within different educational contexts. Teachers also explored blended learning models, flipped classrooms, and online collaborative projects that mirrored this approach towards active student involvement on an interactive basis, as stated by the theory. These practical implementations demonstrated the potential of Engagement Theory to enhance engagement and learning in diverse educational settings (Bonk & Graham, 2006). Moreover, new technological advancements as well as emerging challenges in education have shaped Engagement Theory over time. For instance, social media has provided learners with exposure to augmented reality based on mobile devices or virtual reality platforms that create chances for interaction between teachers and learners. More recently, there has been a growing emphasis on engagement in online and remote instruction, especially since the COVID-19 pandemic began. The rapid transition to distance education highlighted the need for interesting interactive conditions conducive to maintaining the interest and involvement of learners. A suitable framework that addresses these issues is

Engagement Theory, which can help teachers develop online activities that promote collaboration, creativity, and real-world relevance.

3.3.2 The Principles of Engagement Theory

Kearsley and Shneiderman (1998) developed Engagement Theory based on a number of core principles which collectively emphasise that meaningful, interactive and collaborative learning experiences are important. According to this theory, learning is most effective when learners engage in activities that interest them naturally and relate to their future life and career path (Kearsley & Shneiderman, 1998). The principles of Engagement Theory can be epitomised by "Relate-Create-Donate," a framework for developing compelling educational experiences.

Firstly, the principle of "Relate" emphasises that there must be collaboration with social interaction throughout the process of learning. To explain further, Kearsley and Shneiderman (1998) stated that learners are more likely to get engaged when they work in teams discussing ideas, hence sharing responsibilities towards achieving a common goal. This principle also builds on Vygotsky's Social Constructivism, where he argues that cognitive development takes place through social interactions (Vygotsky, 1978). Such practical examples include group work projects, peer teaching and cooperative problem solving, where learners can benefit from others' viewpoints as well as experiences. Ansari and Naseer (2024) argue that collaborative learning does not make it easier for learners to understand, but it assists them in gaining necessary skills like interpersonal communication and teamwork, as well as conflict resolution, among others.

The second principle is "Create". Kearsley and Shneiderman (1998) stated that when learners create something physical or virtual, it makes them more involved in the education process at large. Accordingly, Piaget and Cook (1952) maintains that when learners are creating things during the study period, they tend to apply knowledge and critically think about it, thus enabling them to learn better. Therefore, this approach is consistent with constructivist perspectives on learning, which contend that learners actively and meaningfully construct knowledge. Examples could be multimedia presentations produced by learners themselves, experimentation designs made by learners or arts, music and writing products they may produce. Such activities not only bring about more interesting learning but also give learners

an opportunity to advertise their abilities and receive feedback. In turn, this helps them develop as individuals in society (Harel & Papert, 1991).

The third principle is "Donate." Kearsley and Shneiderman (1998) argue that teachers should situate learning within real-world contexts and audiences. This principle suggests that learners are more motivated and engaged when they see a reason behind their work beyond the four walls of a classroom that can affect their community positively. The perception of practicality raises the worth of learning events for learners, hence enabling them to appreciate their application in life situations. Eyler and Giles (1999) contend that learners feel valued for having done something useful in life. The third principle of Engagement Theory encompasses technology use that facilitates better experiences during lessons. Kearsley and Schneiderman (1998) discussed the possibilities of digital tools for creating interactive, personalised, and immersive learning environments. Technology promotes involvement through access to various sources of information from different media, like distance collaborations conducted online, among others (Jonassen et al. 2008). For instance, a virtual classroom can give an opportunity for learners to connect with real-world situations while still being under controlled conditions, whereas online discussion forums and collaborative platforms facilitate peer-to-peer interaction among learners sharing knowledge with each other. Thus, if teachers include technology in the learning process, then they might be able to develop more engaging and efficient education experiences that are client-driven.

Engagement Theory emphasises these principles in regard to the importance of authenticity and relevance in learning processes. Learners tend to get more involved when they know how their learning is related to their personal lives as well as future aspirations. Dagan (2023) assert that authenticity is crucial if education has any meaning for learners, since it helps them relate what they learnt with real-life challenges around them. This includes the use of case studies alongside problem-based learning and project-based learning, among others, in the curriculum so that learners apply their skills gained so far into something meaningful. These methods will not only make the process of imparting knowledge interesting, but also help learners develop some essential life skills, such as critical thinking ability or problem-solving techniques, which will serve them later on.

Kearsley and Shneiderman (1998) maintain that student interest plays a significant part in determining whether students engage themselves in their studies or not. They further stated

that when they find something interesting about a topic at hand, then it means that if enough time is accorded towards focusing on it, enough understanding about it will result from such efforts, while still remembering it better than anything else done before. By providing choices of subjects relevant and timely, integrated with their lives, the curriculum can help connect with learners` lives. Interest-based learning encourages learners to investigate topics that engage their curiosity, thus developing an intrinsic love of learning (Renninger & Hidi, 2015). This means planning more engaging and effective education should be based on learners' interests and passions.

To sum up, the core principles of Engagement Theory provide a basis for designing educative experiences that are both engaging and effective. The engagement theory highlights key concepts like collaboration, authentic creation, real-world relevance, autonomy, feedback, technology, scaffolding, supportive environment, relevance and student interest that contribute significantly to boosting learners' motivation and engagement. In addition to supporting academic achievement, these principles promote meaningful, interactive learner-centred learning activities that prepare pupils for future life challenges. There is likely to be a greater use of technology in the future as educational practice changes, but the guiding principles encapsulated by the Engagement Theory remain intact. Figure 3.2 below highlights engagement theory.

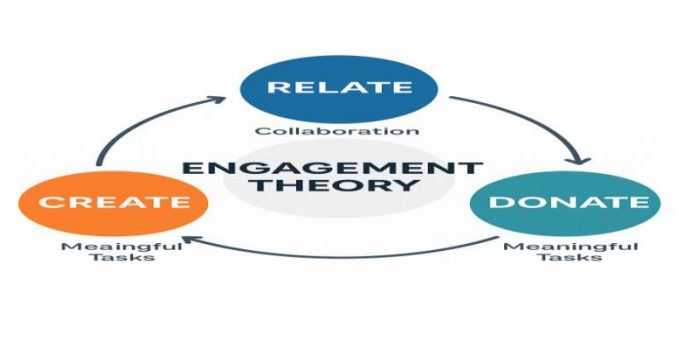


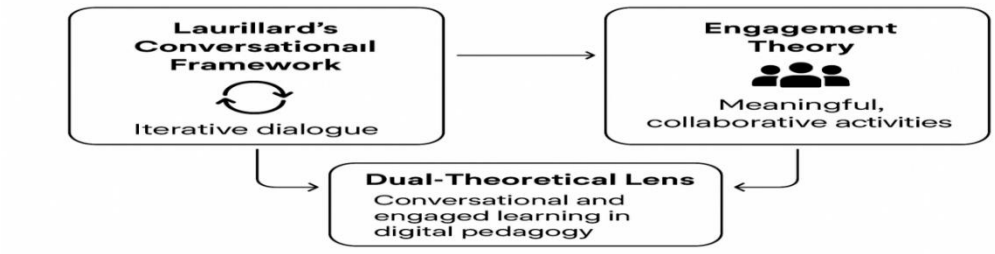
Figure 3.2 Engagement Theory adopted from (Kearsley & Shneiderman, 1998)

3.4 Synthesis of the two theories

Integrating Laurillard's Conversational Framework and Engagement Theory

Laurillard's Conversational Framework provides a robust model for understanding the iterative dialogue that underpins effective teaching and learning. The framework emphasises reciprocal interaction between teacher and learner, where concepts are explained, tested, adapted, and refined through cycles of feedback. In the context of digital pedagogy, this framework highlights how technology can mediate these conversations, whether through online discussions, interactive simulations, or feedback-rich digital platforms, thus supporting knowledge construction in dynamic ways. Engagement Theory, on the other hand, complements this by foregrounding the nature of learning activities that foster deep learner involvement. It argues that learning is most effective when it is collaborative, project-based, and grounded in meaningful tasks that connect to real-world contexts. Within Grade 12 Business Studies, engagement theory draws attention to the importance of designing authentic, technology-mediated activities such as entrepreneurship projects, business case simulations, and collaborative problem-solving tasks.

Taken together, the two theories supplement one another by offering both a process-oriented and a practice-oriented perspective. Laurillard's framework focuses on the process of learning as iterative dialogue, while Engagement Theory focuses on the quality of tasks and learner involvement. Digital-enhanced pedagogy in Business Studies can therefore be examined not only in terms of how teachers and learners interact and exchange knowledge (Laurillard), but also in terms of whether these interactions translate into authentic, purposeful, and engaging learning experiences (Engagement Theory). This dual-theoretical lens strengthens the study's analytical framework, allowing for a deeper exploration of how innovative digital pedagogies both structure meaningful conversations and create engaging activities that enhance learner outcomes. By integrating these perspectives, the study provides richer, context-sensitive insights into how digital pedagogy can transform the teaching and learning of Business Studies at the Grade 12 level. Figure 3.3 provides an illustration of dual theoretical lens (Conversational theory and engagement theory)



Innovative digital pedagogy in Grade 12 Business Studies

Figure 3.3 Dual theoretical lens: Conversational theory and engagement theory

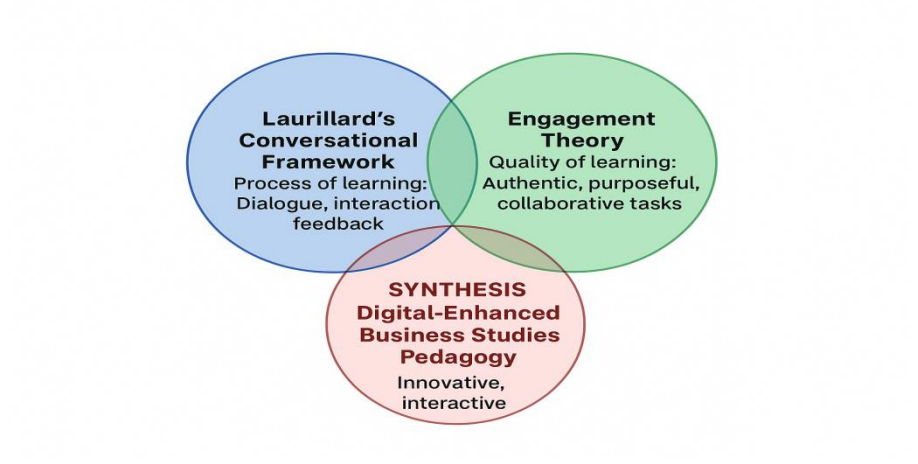


Figure 3.4 Theoretical synthesis of Conversational theory and engagement theory

- Top left (blue box): Laurillard's Conversational Framework → emphasises learning as dialogue, interaction, and feedback.
- Top right (green box): Engagement Theory → emphasises authentic, purposeful, and collaborative tasks.
- Bottom centre (red box): The synthesis → Digital-Enhanced Business Studies Pedagogy, where dialogue-rich learning processes are embedded within meaningful, engaging tasks.

3.5 Conclusion

This chapter explored Conversational Theory and Engagement Theory, which include a brief history and background, principles and applications concerning digital scholarship. Engagement Theory advocates for beneficial student-centred learning experiences while Conversational Theory underscores interactive dialogue during teaching (Jin & Rowan 2022). Therefore, such theories give us a comprehensive framework within which this study can be done so as to develop engaging educational practices in schools. These theories were crucial in this study, as they assisted in identifying the research problem and determining how instructional strategies can be designed to cater for Business Studies teachers and learners. It is through these theories that the methodology and analysis of the study were informed, grounding it on a deep understanding of digital tools and collaborative learning as enablers of student engagement that lead to better academic outcomes. By integrating these theories, the

research has been effectively supported by theoretical frameworks that explore how innovative pedagogical strategies are used with technology in businesses. Thus, this study's background is based on theories that guide researchers into probing complex issues, such as those related to transformative e-pedagogy in schools.

Chapter 4

Research Methodology and Design

4.1 Introduction

The previous chapter presented a theoretical framework guiding the integration of innovative pedagogy to enhance the teaching of Business Studies. This chapter focuses on research design and methodologies that were adopted in this research study. This chapter commences by examining the qualitative methodological approach and its suitability for this research study. This is followed by a discussion of the research paradigm underpinned by this research study. Thereafter, it discusses a case study research design and sampling of the study. Next, the chapter further describes data generation instruments, the process of data analysis and ethical considerations. The chapter concludes by discussing components of trustworthiness such as transferability, credibility, confirmability, and dependability and also the limitations of the study.

4.2 Research approach

McMillan and McMillan (2023) stated that a research approach helps researchers plan protocols and procedures to be followed to generate, analyse and interpret data in order to complete a study. Creswell and Creswell (2018) contend that there are three types of research approaches that are commonly used by researchers in social sciences and natural sciences, namely the qualitative, quantitative, and mixed methods. Qualitative approach generates data through words and pictures from participants, and data is analysed inductively to identify themes, patterns and categories (Creswell & Creswell, 2018). A quantitative approach is used by scientists, generating data through numbers and statistics, and software is used to analyse scientific data (Creswell & Creswell, 2018). This suggests that a qualitative approach is intended to research phenomena that cannot be researched scientifically or experimentally. The other research approach is mixed-methods. Creswell and Creswell (2018) maintained that a mixed-methods approach includes the combination of both qualitative and quantitative data in one study, and this supports researchers in understanding research questions and producing better research findings.

4.2.1 Qualitative approach

This research study adopted a qualitative research design. In describing what a qualitative approach is, Creswell and Creswell (2018, p. 2) define a qualitative approach as an "approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem". This illustrates that a qualitative approach depends on the experience of human beings in their social setting to understand, analyse, and make meaning about the context being investigated by the researcher. Dodge (2011, p. 41) concurs that "qualitative research methods are the best approach when studying phenomena in their natural settings". In this study, the researcher interacted with teachers to get insight about their experience and make meaning about how they employ diverse innovative pedagogy to teach Grade 12 Business Studies.

Likewise, Hammersley (2013, p. 12) defines qualitative research as "a form of social inquiry that tends to adopt a flexible and data-driven research design, use relatively unstructured data, emphasise the essential role of subjectivity in the research process, study several naturally occurring cases in detail, and use verbal rather than statistical forms of approach". This view implies that a qualitative approach enables researchers to generate verbal data to understand participants' behaviour and beliefs. Ultimately, Cohen et al. (2018) argue that various themes and patterns emerged from participants' responses, which make qualitative research impressive. In this regard, the qualitative approach offered the researcher the opportunity to understand themes that emerged through semi-structured interviews and lesson observations, which assisted in consolidating the study findings. In the context of this study, the qualitative approach offered the researcher the opportunity to communicate and interact with each Business Studies teacher. Cohen et al. (2018) stated that the qualitative approach employs diverse data collection techniques, which in turn assist researchers to understand the phenomenon clearly and explicitly. In supporting the above, Creswell and Creswell (2018) maintain that the use of different data collection instruments in qualitative research guarantees trustworthiness and credibility of research.

In this study, the researcher interacted with participants through semi-structured interviews and lesson observations to gain more insight about teachers' experiences. Through this approach, the researcher was able to examine and understand the subjective lived experience of participants and how they derived meaning from their teaching. In other words, this study

did not consider teachers' opinions as their objects were considered. The major reason for adopting a qualitative approach in this study was to understand teachers' experience and explore their diverse pedagogical approaches used in teaching Business Studies lessons and the variations in these approaches across different rural school settings. This research approach allowed researchers to interpret and find meanings of situations through the eyes of participants. Correspondingly, qualitative approaches were suitable for this study because it provided opportunities for participants to share unique experiences to guarantee multiple realities. Moreover, the qualitative approach was considered as the most appropriate approach to answer the 'what', 'how', and 'why'questions by the study participants (Creswell & Creswell, 2018; McMillan & Schumacher, 2023). In addition to the above, a qualitative approach was relevant for this study because it uses open-ended questions and probing to provide participants with an opportunity to respond with their personal words, instead of forcing them to choose from given answers, which a quantitative approach does (Willig & Rogers, 2017).

4.2.2 Characteristics of qualitative research approach

This section presents characteristics of the qualitative approach as outlined by different scholars. Creswell and Poth (2017) and Creswell and Creswell (2018) contend that qualitative research focuses on understanding the meaning and participants' lives in their natural setting. They further stated that this required researchers to be cautious about sensitive issues, which may challenge ethical issues during the course of data collection. To overcome these characteristics, the researcher made sure that participants were asked suitable questions that were only relevant to the study (McMillan & Schumacher, 2023). In other words, participants were not forced to share crucial information that was most valuable and confidential about their professional practice.

The second characteristic of qualitative research is the role of the researcher during data collection. Merriam (2009) asserts that in qualitative studies, the researcher plays a crucial role in collecting and analysing data. This includes crucial field work such as booking a venue and arranging appointments for collecting data without interrupting participants from their core duties (Saldana, 2011). To achieve this, the researcher visited six teachers to conduct face-to-face semi-structured interviews and observe lessons while they were teaching.

The third characteristic of the qualitative approach is that it typically uses various data collection instruments to generate data from participants. This includes interviews, observation and document analysis (Creswell, 2017). As a result, semi-structured interviews and lesson observation were adopted in this research to gain more in-depth data, which assisted in interpreting participants' viewpoints.

Fourthly, qualitative approach enables research to employ thematic analysis. Braun and Clarke (2017) assert that thematic analysis provides opportunities to identify patterns, themes, and meaning that emerge from the data to answer a research question. Neuendorf (2018) concur that common words and similar phrases are used to reflect themes and patterns from qualitative data. After data collection, the researcher made sure that the data was transcribed verbatim in order to reflect participants' viewpoints and meaningful findings. The subsequent section elaborates on the research paradigm.

4.3 Research paradigm

Bertram and Christiansen (2014) assert that various scholars understand the research paradigm in different ways, and this has led to confusion regarding its definition. The term paradigm originated from the Greek word 'paradeigma', which refers to pattern or design (Kuhn 1962; Alharahsheh & Pius, 2020). According to Kuhn (1962), the research paradigm was initially used by a group of scientists to identify resolutions from their studies. Moreover, Ling and Ling (2017) define a research paradigm as a set of assumptions or beliefs about how people view and interpret the world. This corresponds with Cohen et al. (2018), who assert that "a paradigm is a way of looking at or researching phenomena, a worldview, a view of what counts as accepted or correct scientific knowledge or way of working, an accepted model or pattern". This resonates with Kivunja and Kuyini (2017), who stated that a paradigm describes the way researchers believe about the world in which they live. In essence, paradigms reflect the way in which people view the world based on their individual perspectives. This suggests that the reality about the world is based on individual understanding. Ling (2017) also noted that paradigm is based on certain philosophies and assumptions, such as ontology (the nature of reality), epistemology (the nature of knowledge or how reality can be known), methodology (the manner in which information will be generated) and axiology (the value and ethics of the researcher). Table 4.1 below illustrate categories of paradigms adopted from (Kivunja & Kuyini, 2017).

Table 4.1 Summary of categories of research paradigm

Paradigm	Purpose of research paradigm
1. Positivist paradigm	To develop "laws" by predicting the coming events.
2. Post-positivist paradigm	To generalise the worldview in order to develop "laws" about the world (Kivunja & Kuyini, 2017).
3. Critical paradigm	To empower people and to change society (Kivunja & Kuyini, 2017).
4. Interpretive paradigm	To understand the world through subjective experience of human beings (Kivunja & Kuyini, 2017).

Firstly, Morgan (2007, p. 8) postulated that positivist paradigm focuses on "scientific method or scientific research that is based on rationalism". Similarly, Bertram and Christiansen (2014) concur that the positivist paradigm is used in both social and natural sciences research, and it is based on scientific methods. This echoes with Cresswell (2014), who stated that the positivist paradigm assumes the world is scientific; therefore, research data should be interpreted statistically. Likewise, Kivunja and Kuyini (2017) believe that researchers operating in this paradigm are always eager to formulate or test hypotheses through the use of mathematical equations and calculations in order to draw conclusions. Furthermore, Pring (2015) mentions that the positivist paradigm is commonly used by researchers who adopt a quantitative approach in their research studies. The assumption of this paradigm is that knowledge is objective and constructed through observation, engagement and experiment. As a result, Bryman (2016) critiques the positive paradigm for failing to differentiate between people and social sciences, as this paradigm views human beings as objects. In this study, the researcher did not consider the positivist paradigm since the study adopted a qualitative approach and involved human life experiences from their social context.

Secondly, the post-positivist paradigm shares common features with the positivist paradigm. Bertram and Christiansen (2014) assert that the goal of post-positivist paradigm is to predict how the natural world works. They further maintain that the assumption of this paradigm is that there is one reality to predict the world of natural and social sciences. Mackenzie and Knipe (2006, p. 445) acknowledge that the post-positivist paradigm views the "world as ambiguous, variable and multiple in its realities, what might be the truth for one person or cultural group may not be the truth for another". Similarly, Kivunja and Kuyini (2017) mention that the post-positivist paradigm assumes that reality is imperfect and cannot be understood since the world is not completely understood. Further to the above, Creswell (2009) articulated that post-positive researchers expand knowledge by employing both qualitative and quantitative methods in research studies. This is in line with Bertram and Christiansen's (2016) assertion, which maintains that post-positivist researchers make use of large-scale sampling to generalise findings on their studies. Panhwar et al. (2017) argue that post-positivist paradigm is unsuitable for social sciences research. Therefore, since this study was not based on analytical facts and observations, post-positivists researchers deem it unsuitable for this study.

Thirdly, Kivunja and Kuyini (2017) stated that the critical paradigm is built on the basis of understanding social justice issues, such as economic, political and social factors. They added that the critical paradigm is known as the transformative paradigm due to the nature of its reality. The objective of the critical paradigm is not only to understand or describe the phenomenon that is being investigated, but to go beyond to bring drastic change. In the same vein, Bertram and Christiansen (2014) noted that researchers operating in a critical paradigm seek to transform inequalities in society through the emancipation of individuals. However, Poni (2014) argues that researchers employ a critical paradigm with the intention of achieving a political agenda, as it sometimes encourages people to make unnecessary changes regardless of their basic needs. Therefore, the critical paradigm was unsuitable for this research study.

This study is located within the interpretive paradigm. Cohen et al. (2018) mention that the interpretive paradigm is based on the study of individual, unique, or personal experiences to understand the reality of the world that surrounds them. They add that interpretive studies provide researchers with the opportunity to interact with participants to understand the phenomenon being explored. Consequently, in this research study, the researcher interpreted

teachers' experiences in teaching of Grade 12 Business Studies. The ontological assumption of this paradigm is that the nature of knowledge and reality is subjective and socially constructed through engagement with different people (Bertram & Christiansen, 2016; Maree, 2012; Cohen et al., 2018; Creswell & Creswell, 2018). This suggests that Business Studies teachers' experience was the crucial source of information to understand the phenomenon being investigated. To achieve this, semi-structured interviews and lesson observations were utilised to generate data in order to understand the social reality of participants. This study argued that the interpretive paradigm is essential to construct knowledge in qualitative research. This resonates with Baxter and Jack (2008, 41p. 545) who maintain that the interpretive paradigm "recognises the importance of the subjective human creation of meaning".

This study adopted an interpretive paradigm to understand how teachers' integration of diverse digital pedagogy enhances the teaching of Grade 12 Business Studies. Creswell and Creswell (2017) argue that it is important for researchers to interact with or engage in conversation or dialogic discourse with participants to obtain meaningful actions that occur in the phenomenon being explored. Cohen et al. (2018) concur by stating that people make meaning about the world based on their own perspectives. Therefore, in this study, the researcher interacted with Business Studies teachers to understand how they integrate innovative pedagogy to enhance teaching and learning. Alharahsheh and Pius (2020) assert that the interpretive paradigm provides researchers with the opportunity to understand multiple subjective aspects of teachers' experiences about the points of study being explored.

Moreover, Creswell and Creswell (2018) maintain that the interpretive paradigm is suitable for qualitative research in order to analyse and interpret participants ' viewpoints. In supporting this view, Maree (2012) affirms that qualitative research is related to the interpretive paradigm as it seeks to understand how human beings make meaning of the world. Consequently, Davies and Hughes (2014) concur that qualitative research employs an interpretive paradigm to understand participants' lived experiences. Therefore, the alignment of interpretive paradigm with the qualitative approach enables researchers to employ a case study research design to analyse and make meaning about the integration of diverse innovative pedagogy to enhance the teaching of Grade 12 Business Studies in secondary schools. It also allows researchers to present participants' data using words and direct quotations. Next to the above, Creswell and Creswell (2017, p. 142) argue that "the

interpretivism perspective, researchers tend to gain a deeper understanding of the phenomenon and its complexity in its unique context instead of trying to generalise the base of understanding for the whole population".

Therefore, the interpretive paradigm was a suitable study for this because this study sought to understand the research phenomenon through the eyes of the participants, guided by qualitative data. Cohen et al. (2018, p. 22) argue that "investigation for the interpretive researcher aims to understand how this glossing of reality goes on at one time and in one place and compare it with what goes on at different times and places". Therefore, this suggests that reality is not absolute. This study sought to offer Business Studies teachers the opportunity to share their unique teaching experience and inner feelings with the researcher in order to draw findings about the phenomenon that is being explored. Therefore, the interpretive paradigm was suitable for this study as it provided the researcher with the opportunity to analyse and interpret teachers' experiences and opinions regarding the integration of diverse, innovative pedagogy to enhance the teaching of Grade 12 Business Studies. Creswell (2017) argues that "The process of qualitative research is largely inductive, with the inquirer generating meaning from the data collected in the field" Therefore, since this study data was generated through semi-structured interviews and lesson observation, the interpretive paradigm was deemed to be suitable for this study, as it enabled the researcher to analyse participants perceptions, beliefs and experiences using inductive approach.

In addition, the interpretive paradigm has been criticised by numerous researchers. Walsham (2006) argue that the data collected might be limited to participants' experiences, while the interpretations of research findings might present the view of other participants. Furthermore, Gichuru (2017) articulated that the interpretive paradigm lacks consistency, as participants are found from different settings. This suggests that findings cannot be generalised from one context to another. In dealing with the limitations of the interpretive paradigm, the researcher was cautious during the data collection period to ensure that all data was accurately recorded. Secondly, participants were sampled in one district in the KwaZulu-Natal Province, and they shared common features, such as community culture, norms, and practices. To support this, Creswell (2017) contends that the objective of conducting research is to understand participants' experiences in their own context. The following section presents the research approach employed in this study.

4.4 Research design

This study aimed to explore the diverse pedagogical approaches employed by teachers in integrating digital technologies into Business Studies lessons. To achieve this, the research adopted a case study research design to understand teachers' personal experiences regarding the integration of diverse innovative pedagogy to enhance the teaching of Grade 12 Business Studies in a particular context. Numerous scholars highlighted that case studies have been widely employed to conduct research in various fields such as science and social sciences (Yin, 2015 & Rule, 2024).

In describing case studies, Gerring (2004) believes that case studies aim to understand single or groups of human beings from their social context by analysing and interpreting their experiences and actions. This echoes with Zainal (2007) and Baxter and Jack (2008), who maintained that case studies provide researchers with the opportunity to explore events, individuals, and groups of people in one context. This definition aligns with Yin (2018), who defines a case study as a process of exploring a specific situation to obtain an in-depth understanding of a phenomenon or context being investigated.

Yin (2018) further argues that case study research design aims to understand a single phenomenon by using multiple data collection methods or several sources of information. The above sentiments suggest that the case study enabled the researcher to utilise different data generation instruments to collect data from participants. This study generated data through semi-structured interviews and observations. Therefore, the case study provided the researcher with an opportunity to formulate probing questions to understand the participant's viewpoints. In corroboration, Simons (2014, p. 21) contends that "A Case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme or system in real life". The above definition highlights that a case study can be used as a framework that may include different methods of research.

In justifying why a case study is crucial, Gustafsson (2017) asserts it is suitable for gaining insight and a deeper understanding into the phenomena explored. Therefore, a case study research design was suitable for this study, as it allowed the researcher to collect information from participants about their personal and professional practices through semi-structured interviews and observations. More importantly, understanding teachers' personal experiences

enabled the researcher to achieve the objectives of this present study. In the same vein, Maree (2016, p. 72) defines a case study as a "plan or strategy that moves from the underlying philosophical assumptions to specify the data-gathering methods to be used and the data analysis to be done. Researchers select a case study research design based on the research paradigm and the researcher's approach for a particular study.

Bertram and Christiansen (2014) pointed out that a case study is often used by researchers who adopt an interpretive paradigm in their studies. Similarly, Starman (2013) supported that a case study is generally adopted in qualitative research as it is characterised by an interpretive paradigm. Concurring with the above assertion, Maree (2012) maintains that case studies are intended to provide a deeper knowledge of how individuals relate to and interact with one another in a situation that is distinct from the setting in which they are used, as well as the meaning that emerges from the phenomenon that is being studied with an interpretive viewpoint. Therefore, a case study was most appropriate for this research study to gather different views on how teachers employ innovative pedagogies to enhance the teaching of Business Studies in a specific context. Drawing on the above scholars, the case study was relevant for this study, as this research employed a qualitative approach.

Yin (2003) maintains that case research involves investigating single or multiple contexts. He further stated that a single case study aims to examine one case and is suitable for testing an experiment to formulate a theory. Multiple case studies seek to examine diverse experiences from different cases for theory advancement (Yin, 2003).This current study adopted multiple case studies to understand diverse pedagogical approaches employed by Business Studies teachers from different school contexts. In other words, multiple case study was adopted not to compare findings but to complement the information obtained from one case to another. Baxter and Jack (2008) portray that multiple case studies provide research with the opportunity to study and analyse particular contexts with the objective of supplementing information between cases. To support the above, Yin (2003) cautions that researchers should be careful when selecting cases in order to predict similar outcomes from different cases.

In this research, a multiple case study involved six secondary schools from different contexts in Harry Gwala District, KwaZulu-Natal Province. In addition, six Business Studies teachers who integrate technological devices in teaching and learning were selected, and the researcher interacted with them through observation and semi-structured interviews.

Therefore, each school was regarded as a case. Multiple case studies were suitable for this study because it would be difficult for the researcher to study all Business Studies teachers in the country. In short, multiple case studies provide an opportunity to study individual cases in order to get different perspectives and draw comparisons about what was happening in each case. Yin (2003) opines that a case study is useful to answer "how" and "why" rather than what question in a research study to ensure that in-depth data is produced. Therefore, such questions enable researchers to get deeper insight and understanding of the phenomenon that is being studied and also enable participants to reflect on their past experience. In this study, a case study was suitable to answer the second research question, "how teachers integrate digital technology into their instructional design to enhance the teaching of Business Studies Grade 12".

4.4.1 Types of case study

Yin (1994) highlighted that there are several types of case studies, including single, multiple, collective, explanatory, descriptive, instrumental and exploratory. He further outlines three major case studies, which are classified as explanatory, descriptive and exploratory case studies. Stake (1995) postulates that case studies may be intrinsic, instrumental and collective. Figure 4.1 below illustrate types of case studies.

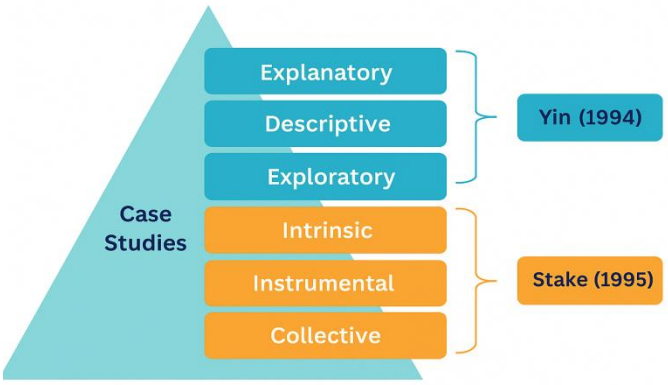


Figure 4.1 Different types of case studies adopted from (Yin 1994 & Stake 1995)

The following section provides a more in-depth discussion of the types of case studies to shed further light.

4.4.1.1 Explanatory case study

According to Yin (1994), explanatory case studies seek to provide a detailed explanation of 'how' and 'why' the experience occurred in a particular way. He further asserts that an explanatory case study is typically used by researchers who intend to answer "how and why" questions in a research study. This illustrates that the focus of an explanatory case study is on explaining why and how the event occurs, instead of providing a description of the phenomenon. In addition, this type of case study seeks to provide an in-depth explanation of participants, context, and phenomenon in their natural setting, which may be difficult to study through survey or experimental research (Yin, 2003). Furthermore, Baxter and Jack (2008) believe that explanatory case studies provide researchers with the opportunity to explain causal links based on participants' complex realities. In support, Chopard and Przybylski (2021) contend that explanatory case studies allow researchers to obtain reasons for the success or failure of the event under investigation.

4.4.1.2 Descriptive case study

Yin (1994) contends that a descriptive case study is useful for describing what is happening in a phenomenon from a real-life setting where the study occurred. Baskaranda (2014) asserts that descriptive case studies are mostly used to develop theories since they aim to fully explain many aspects of a phenomenon within its environment. Zainal (2007) maintained that a descriptive case study can be a form of narrative enquiry.

4.4.1.3 Exploratory case study

Yin (2018) maintains that exploratory case studies seek to examine real-world situations in which interventions that are being evaluated do not have clear outcomes. In the same vein, Baxter and Jack (2008) concur with Yin (2003) and opine that an exploratory case study is useful for exploring phenomena without predicting the outcome of research. Chopard and Przybylski (2021) share a common understanding and stated that this type of case study is suitable to test theories and hypotheses. They further indicated that "research questions to be answered or design options to be used in a more focused and in-depth subsequent study" (Chopard & Przybylski, 2021, p. 1). In this way, researchers may develop a study framework through an exploratory case study.

In addition, Zainal (2007) argues that exploratory case studies enable researchers to explore phenomena of interest in order to discover what is unknown and shed more light. This study adopted an exploratory case study to understand how teachers incorporate diverse, innovative pedagogy to enhance the teaching of Business Studies in Grade 12. An exploratory case study was adopted in this research to understand how teachers enhance collaborative learning and engagement through innovative digital pedagogy. Understanding the teacher's feelings and opinions was crucial for the researcher to produce a new model that may have a positive impact on future research. In addition, an exploratory case study is relevant to this study, as it offers researchers the opportunity to interact with teachers through semi-structured interviews and observations. It also helps researchers to understand unique features of teachers, such as their experience and beliefs. In other words, an exploratory case study offers researchers the opportunity to analyse and interpret participants' experiences.

4.5 Sampling of participants

4.5.1 Sampling

Cohen et al. (2018) and Creswell (2014) assert that sampling is an essential component to guarantee quality assurance and trustworthiness in any research study. Dawson (2023) describes sampling as the process of choosing a small number of participants from a population to provide information regarding the problem that is being investigated. Dawson (2023) further emphasised that qualitative research is characterised by small-scale sampling, and researchers collect a large volume of data, which may be time-consuming to analyse. Similarly, Creswell (2014) asserts that sampling refers to making decisions about people, settings, events, or behaviours to observe during the research process. Therefore, it should be noted that researchers need to be careful when selecting study participants. Likewise, Naderifar et al. (2017) refer to sampling as the process of choosing suitable participants for the study. The above assertion reflects that sampling should be based on the nature and purpose of research.

Etikan and Bala (2017) categorise two types of sampling strategies, which include probability and non-probability sampling. This suggests that participants are selected based on probability or non-probability sampling. According to Pandey and Pandey (2021), probability sampling refers to choosing a sample from a large population. This suggests that everyone in the population has an equal chance of being selected in the sample. Probability sampling is

commonly known as a random sample. Cohen et al. (2018) outline common examples for probability sampling, which include random, cluster, systematic and stratified sampling. Hossan et al. (2023) maintained that probability sampling is generally used in quantitative research. This may also include mixed methods research. Therefore, probability sampling was irrelevant to this current research study since it adopted a qualitative approach. Furthermore, this study adopted a case study research design, which is part of non-probability sampling. Therefore, probability sampling was not suitable for this research study.

On the other hand, non-probability sampling refers to a sampling technique whereby population is not equally represented in a study. This implies that non-probability sampling focuses on specific cases or individuals. In a non-probability sampling, researchers select participants using their own discretion guided by research questions and objectives. Furthermore, Bertram and Christiansen (2014) contend that non-probability sampling uses a small sample size and does not include the entire population. This suggests that it is easy and cost-effective to generate data from participants. Pace (2021) argue non-probability sampling is appropriate for qualitative research. Therefore, this sampling provides an opportunity to understand participants' thoughts and behaviour. There are four types of non-probability sampling, including snowball, quota, convenience, and purposive sampling as depicted in Figure 4.2 below.

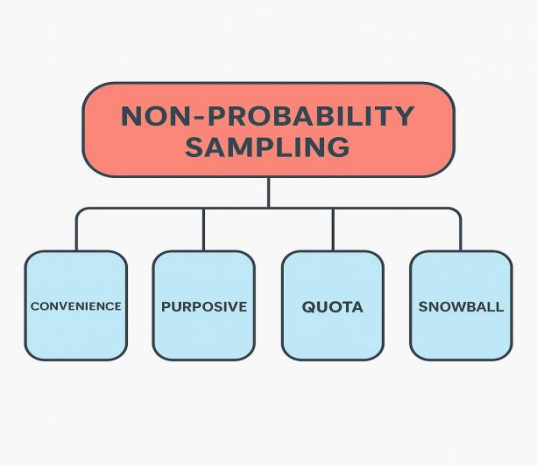


Figure 4.2 Four types of non-probability sampling adopted from (Pace 2021)

4.5.2 Purposive sampling

Drawing from different types of non-probability sampling, this study adopted purposive sampling to select six Grade 12 business studies teachers, as the objective of the study was not to generalise findings but to obtain in-depth insights from a specific group of participants. More importantly, teachers were selected from six different schools. Moreover, according to Rule and John (2011, p. 64), "purposive sampling is a technique used by researchers where participants are deliberately chosen because of their suitability in advancing the purpose of the research". This implied that the researcher selected desired participants in the study. Creswell (2017) affirms that in purposive sampling, researchers use personal discretion to select suitable participants. However, the shortcoming of purposive sampling is that it may be time-consuming to analyse data generated from participants. To mitigate this shortcoming, researchers clearly understand the strengths and weaknesses of qualitative research. Therefore, researchers were aware that this sampling required a large volume of data, and he was well prepared for this crucial project.

In support of other scholars, Cohen et al. (2018) described purposive sampling techniques as the process of selecting participants who meet specific criteria or characteristics. Furthermore, Rahi (2017) advocates that in purposive sampling, researchers use their own judgement to select suitable people who understand the problem being researched. This enables researchers to understand significant issues from a research context. Purposive sampling is suitable for studying highly experienced participants. However, Cohen et al. (2018) cautioned that researchers should be careful when selecting participants from the population. As a result, purposive sampling was used to select six Business Studies teachers who met the criteria for this study. Participants were selected because of their teaching experience and knowledge of incorporating innovative pedagogy in the classroom environment. Purposive sampling was an appropriate method for this study as participants had enough experience in using ICT for curriculum delivery. In other words, purposive sampling assisted researchers to get in-depth knowledge and teaching experience of Business Studies teachers using diverse innovative pedagogy. In essence, Yin (2003) maintained that purposive sampling enables participants to answer the 'how' question in a study that is being explored. The strength of purposive sampling is that it makes it easy to theoretically generalise findings, which is more essential in qualitative research (Cohen et al., 2018). The upcoming section elaborates further on convenience sampling.

4.5.3 Convenience sampling

According to Cohen et al. (2018), convenience sampling involves choosing the nearest individual to serve as participants and also those who happen to be available and accessible all the time. They further stated that convenience sampling is cost-effective as the researcher requires minimal effort in searching for participants. In this current study, convenience sampling was used to select Business Studies teachers who are easily accessible due to logistics and financial constraints. This suggests that convenience was suitable for this study since the researcher was able to meet with participants without any difficulties. In other words, this sampling technique ensures that the researcher does not waste time searching for participants, since only accessible participants were selected. Teachers were selected from six secondary schools from Pholela, Ixopo and UMzimkhulu Circuit in Harry Gwala District in KwaZulu-Natal Province. In short, these schools were conveniently situated near the researcher's place of work, thereby minimising travel costs. Therefore, money and time were saved in searching for participants who could not understand the phenomenon that was being investigated. The real names of schools and participants were not revealed; instead, pseudonyms were provided for confidentiality and anonymity purposes. However, the shortcoming of convenience sampling is that participants may not be representative of the entire population (Cohen et al., 2018). To mitigate this shortcoming, the researcher included teachers from diverse school contexts to enhance the variation within the sample and increase the study's transferability.

4.5.4 Target participants

The target participants for this study comprised Grade 12 Business Studies teachers from four secondary schools in Harry Gwala District. The selected participants were chosen from schools that are relatively well-resourced, characterised by access to Wi-Fi and various digital tools such as smart boards, tablets, projectors, and laptops. These criteria were essential, as they ensured that the participants had some level of experience and familiarity with integrating technology into their curriculum delivery and teaching practices. The inclusion of teachers from schools equipped with these technologies was crucial for gaining insights into how diverse pedagogical approaches employed by teachers in integrating digital technologies into Business Studies lessons and the variations in these approaches across different rural school settings in Harry Gwala District.

4.6 Data generation methods

Tenny et al. (2022, p. 15) contend that "qualitative methods in community-based research typically involve observing, listening, and engaging with people in their natural settings to learn about particular phenomena in their lives". Bertram and Christiansen (2014) assert that the choice of data generation is informed by research questions and research design for a particular study. This study adopted two data generation instruments: lesson observation and semi-structured interviews. Creswell and Creswell (2018) concur that researchers may find contextual, rich data through the use of multiple data generation instruments, such as interviews and observations. Therefore, the selection of the data generation instrument was based on the study's research questions.

4.6.1 Lesson observations

According to Gillham (2000, p. 46), observation include "a prolonged immersion to gain first-hand knowledge of the context, primarily through observation of individuals as they go about their normal work activities" In the same vein, Walliman (2011, p. 195) define observation as "a method of recording conditions, events and activities through the non-inquisitorial involvement of the researcher". Similarly, Kumar (2011, p. 140) describes observation as "a purposeful, systematic and selective way of watching and listening to an interaction or phenomenon as it takes place". Therefore, this current study generated data through lesson observations. McMillian and Schumacher (2014) stated that observations are a data generation instrument used by researchers to record what is happening in a research context. Walshe (2012) maintained that observation is typically used in qualitative research, and it is commonly used in both social sciences and natural sciences research. They further emphasised that observation provides researchers with an opportunity to collect live data and witness what occurs in the research setting. Bertram and Christiansen (2014) concur with Walshe (2012) and attest that observation includes visiting the location of participants to take note of what is actually happening. They also affirm that it enables researchers to collect primary or authentic data directly or face-to-face. Similarly, Cohen et al. (2018, p. 156) contend that observation offers a researcher the opportunity to gain "live data from naturally occurring social situations". Therefore, observing Business Studies teachers in their classroom setting assisted me in obtaining first-hand, reliable and valid data for this study. In

short, data generated through observation-assisted research was compared to data generated during one-on-one semi-structured interviews.

Most importantly, Maree (2012) believes that observation is an essential data collection instrument because it allows researchers to confirm activities that took place in a research context, rather than relying on participants' reports. Therefore, researchers may draw a conclusion about a phenomenon based on observation. Taherdoost (2021) argue that observation is used to generate data that cannot be collected through other data generation instruments, such as interviews, questionnaires, surveys, and document analysis. As a result, observation allows researchers to examine the pattern of behaviour from participants. This helps to understand the participant's beliefs, values, and experiences about the study being researched.

Cohen et al. (2018) outline two types of observations, namely structured and unstructured observations. According to Cohen et al. (2018), structured observation occurs when the researcher is aware of the activities that are being observed. Therefore, in structured observation, researchers may develop an observation schedule in advance because they know exactly what they are looking for. Structured observation is suitable for testing hypotheses as research can predict the outcome of the observation.

On the other hand, unstructured observation occurs when researchers record all activities that take place in the research context because the outcome of observation is uncertain. This suggests that researchers record activities and later decide which data is more valuable for research. In the same vein, Ciesielska, Bostrom and Ohlander (2017) distinguish between two types of observations: direct observation and indirect observation. According to Ciesielska et al. (2017), direct observation occurs when researchers visit the setting personally and indirect observations occur remotely or online. This study adopted structured observation. Therefore, the researcher remained a complete or non-participant observer during the lesson observation. Maree (2012) contends that complete observer occurs when the researcher does not participate in the scene that is being researched. Cohen et al. (2011, p. 459) assert that non-participant observation occurs when the researcher "adopts a passive, non-intrusive role". To achieve this, the researcher remained passive during lesson observation since the goal was to record activities that occurred during the Business Studies lesson without interference with the teacher. To begin the observation process, the researcher made an appointment with the

school gatekeepers to observe the Business Studies lesson. Upon approval, participants were informed of the purpose and objectives of observations. This is in line with Maree (2012), who argues that researchers should explain the purpose of their research before the commencement of observation. Thereafter, a detailed observation schedule was developed (refer to Appendix H) to record how teachers integrate diverse innovative pedagogy to enhance the teaching of Business Studies. In this way, researchers get the opportunity to observe and record the behaviour and practices of teachers through an observation schedule.

Apart from recording on the observation schedule, lesson pictures were captured to provide a detailed description of the teacher's activity. Therefore, lesson observation helped the researcher to probe during the semi-structured interview about what was happening in class when they were teaching. This study argued that teachers integrate diverse innovative pedagogy to enhance the teaching of Grade 12 Business Studies. This was noted in class as teachers were using various digital tools such as a data projector and smartboard (see Chapter 5). Davies and Hughes (2014, p. 205) maintain that observation provides researchers with the opportunity to "research what people do rather than what they say they do". Next, teachers were observed during the data collection period between April 2024 and September 2024. The researcher visited six secondary schools to observe Business Studies before and after the commencement of semi-structured interviews, and each lesson was observed for approximately 60 minutes. Teachers were observed during their normal period, as reflected on the school timetable, to avoid inconveniencing other teachers. In this study, observation assisted researchers to describe and explain the type of digital tools that are integrated by teachers to enhance teaching of Grade 12 Business Studies, as well as all that was happening in the classroom environment as teachers were using digital technology in class.

Observations have advantages and disadvantages. Yin (2003) believes that observation assists researchers in answering *how* questions. McMillian and Schumacher (2014) contend that observation allows researchers to record activities in order to understand the setting that is being explored. Maree (2012) argues that observation provides researchers with the opportunity to focus on a specific issue, which assists in answering study research questions. In this current study, observation allows researchers to obtain primary data from participants. This is in line with Wasterfors (2018, p. 314), who maintained that through observation, the researcher may "see, Hear, feel and 'be there' personally. Classroom observation helped the

researcher understand crucial information that may be omitted during semi-structured interviews, and also to visualise various resources used by teachers in their lessons. Creswell and Creswell (2018) assert that the shortcoming of observation is that it is time-consuming, as researchers need to travel to reach participants, and participants may feel uncomfortable. Brynard et al. (2014, p. 49) supported that the "target group may feel that an outsider is interrupting them in their work and they may become uncomfortable." Researchers address the above weaknesses by taking field notes while observing a lesson. The next section examined semi-structured interviews as a data generation instrument.

4.6.1.1 Semi-structured interviews

The second data generation instrument for this study was semi-structured interviews. Davies and Hughes (2014) contend that in qualitative research, interviews are frequently used to generate rich data about participants' experiences. Bertram and Christiansen (2014) maintained that interviews are usually used in interpretive studies to analyse and interpret participants' experiences. In understanding the concept of an interview, Johnson and Christiansen (2010, p. 203) define it as "a data collection method in which an interviewer asks an interviewee questions". Similarly, Maree (2012, p. 87) describes an interview as a "two-way conversation in which the interviewer asks the participants questions to collect data and to learn about the ideas, beliefs, views, opinions and behaviour of participants". With reference to the above, there are two parties involved in the interview process, namely the interviewer and the interviewee.

Essentially, interviews may be conducted face-to-face, telephonically, or virtually, depending on the researcher's flexibility (Cohen et al. 2018). Furthermore, Hofisi et al. (2014) concur that interviews are flexible for both the interviewer and the interviewee. The above definition indicates that interviews are not merely meant for exchanging information, but to generate verbal data in order to understand participants' experiences about the phenomenon. Ruslin et al. (2022) assert that interviews also allow a researcher to use probing and respond to ask clarity-seeking questions for further understanding. There are various types of interviews, classified as follows: semi-structured, unstructured, and structured interviews (Creswell, 2014). Therefore, this study employed semi-structured interviews as a second data collection instrument. In support, Rabionet (2022, p. 563) proposed six crucial stages of planning and executing semi-structured interviews, which are outlined as follows: selecting the type of

interview, establishing ethical guidelines, crafting the interview protocol, conducting and recording the interview, and reporting the findings."

Opdenakker (2006) asserts that semi-structured interviews provide an opportunity for synchronous communication, which enables the interviewee to provide extra information to the interviewer through the use of social cues, such as facial expressions, body language, and voice tone. Moreover, a semi-structured interview allows the researcher to ask participants similar questions during the interview session (Cohen et al., 2018). The strengths of semi-structured interviews are that they enable researchers to meet face-to-face with participants and build healthy relationships with them to achieve the trustworthiness of the study (Cohen et al., 2018). Moreover, Maree (2012) maintained that semi-structured interviews enable researchers to probe and ask follow-up questions to obtain richer data from participants. Similarly, Creswell (2012) argues that the use of probing during semi-structured interviews enhances the reliability of data generated from participants. Concurring with the above, Wahyuni (2012) stated that semi-structured interviews use open-ended and probing questions, which assist the researcher in developing themes and identifying crucial concepts for a study.

During the interview process, the researcher probes further to ask for clarity and to get more descriptive information about the phenomenon that was being explored. In addition, Baškarada (2014) asserts that semi-structured interviews are usually employed by researchers who adopt a case study research design. Therefore, since this study adopted an exploratory case study research design, the researcher was able to generate sufficient qualitative data to understand how Business Studies teachers integrate innovative pedagogy to enhance teaching and learning. Coy (2019) contends that semi-structured interviews comprise pre-designed questions. To begin the interview process, an interview schedule consisting of various questions was developed in advance. Thereafter, each participant was subjected to 45-60 minutes of face-to-face semi-structured interviews to give them sufficient time to express their viewpoints. Essentially, semi-structured interviews were conducted after lesson observation, which offered the researcher the opportunity to compare and contrast data generated through observations with data generated during face-to-face interviews. Follow-up interviews were conducted to refine information. Further to the above, follow-up interviews lasted 15 minutes, and were conducted telephonically. In addition, interviews were conducted after school hours in a private location to avoid disturbing teaching and learning. As a results,

this assisted the researcher in maintaining privacy and confidentiality with each participant.The figure 4.2 below illustrates data generation plan for this study.

Table 4.2 Data generation plan for this research study

Research questions	Method of data collection	Participants	Where was data collected?	When was data collected?
What digital technology do teachers integrate to enhance the teaching of Business Studies grade 12?	Lesson observations and semi-structured interviews	Grade 12 Business Studies teachers	Lesson observation and semi-structured interviews in schools	Between April and September 2024
What digital tools are mostly effective in teaching Grade 12 Business Studies?	Lesson observations and semi-structured interviews	Grade 12 Business Studies teachers	Lesson observation and semi-structured interviews in schools	Between April and September 2024
How do teachers integrate digital technology into their instructional design to enhance the teaching of Business Studies Grade 12?	Lesson observations and semi-structured interviews	Grade 12 Business Studies teachers	Lesson observation and semi-structured interviews in schools	Between April and September 2024
What are the teachers' experiences with the affordances of digital technology that enhance innovative pedagogy in Business Studies?	Lesson observations and semi-structured interviews	Grade 12 Business Studies teachers	Lesson observation and semi-structured interviews in schools	Between April and September 2024

4.7 Data analysis

Cohen et al. (2018, p. 643) describe qualitative data analysis as the process of organising, describing, understanding, accounting for, and explaining data, making sense of data in terms of the participant's definition of the situation (of which the researcher is one), and noting patterns, themes, categories, and regularities are the task of the qualitative. Similarly, Maree (2012, p 99) explains that data analysis is "…approaches, processes and procedures whereby researchers extract some form of explanation, understanding or interpretation from the qualitative data collected of the peoples and situations that they are investigating." These definitions suggest that data analysis provides researchers with the opportunity to identify meaning from data generated by participants. Furthermore, the above definitions make it clear that the goal of data analysis is to interpret the data through specific processes that allow for deductive or inductive reasoning about how participants integrated the study's phenomenon. In support of the above, Djawadi (2021) affirms that the use of thematic analyses is characterised by deductive and inductive process

This study adopted thematic analysis to analyse data generated through lesson observations and semi-structured interviews and it took researcher three months to analyse the data using both deductive and inductive process. Braun and Clarke (2019) assert that thematic analysis helps to identify patterns, themes, and meaning that emerge from the data in order to answer the study's research question. They further stated that it is suitable for qualitative researchers. Moreover, Braun and Clarke (2019) proposed six interconnected phases of thematic analysis as detailed in figure 4.3 below

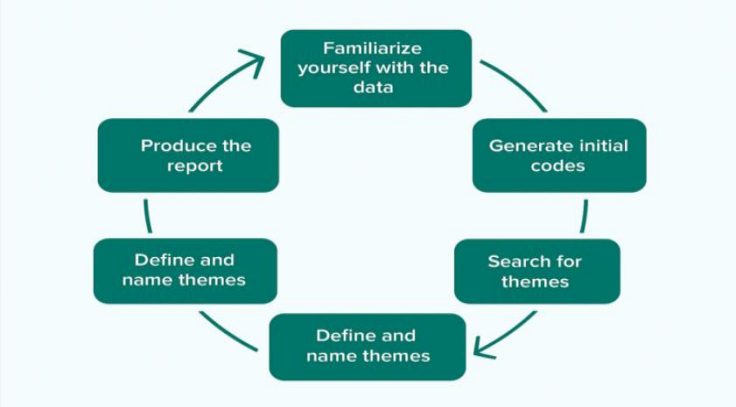


Figure 4.3 Phases of thematic analysis adopted from (Braun & Clarke, 2019)

Stage 1: Familiarise with data

After generating data through lesson observation and semi-structured interviews, the researcher listened to audio recordings and transcribed raw data into a text format. This process assisted in familiarising the researcher with the data and making meaning of it, developing meaningful insights. Thereafter, the researcher read interview transcripts and observation field notes several times. To support the above, Maguire and Delahunt (2017) contend that it is essential to "make notes and jot down early impressions". This process provided researchers with the opportunity to identify catchy phrases and similar concepts. Braun and Clarke (2019) maintain that the process of data analysis involves studying the data multiple times to identify meaning before coding.

Stage 2: Generation of initial codes

In this stage, the researcher organised the data into small chunks to identify meanings from the data (Maguire & Delahunt, 2017). Richards and Morse (2012, p. 167) describe coding as "the strategy that moves data from diffuse and messy text to organised ideas about what is going on". Researcher colour-codes segments of similar data, words or phrases and groups them according to research questions. Therefore, colour coding assisted researchers in this study to identify patterns and categorise them into themes.

Stage 3: Searching for themes

At this stage, the researcher examines the codes and groups them according to the research questions. This was necessary in order to identify themes, sub-themes, and patterns that emerged from the data. Next, the researcher used a literature review and a theoretical framework to identify patterns of meaning from the data.

Stage 4: Review potential themes

At this stage, the researcher grouped similar codes into possible categories, which assisted in identifying major themes. Most importantly, the secondary theme was identified in this stage, which helped in developing study findings.

Stage 5: Define and name themes

In this phase, the researcher identified the essence of what each theme is about, which assisted in understanding the content of each theme and how sub-themes relate to each other. This process further provided an opportunity for comprehensive data analysis and interpretation. Consequently, four major themes emerged from the data and were categorised as digital tools, integration of digital tools, affordances of digital technology and professional supports. These themes were discussed in more detail in Chapter Five, Section 5.4.

Stage 6: Produce the report

After defining themes and sub-themes generated through face-to-face semi-structured interviews and lesson observation, the researcher interpreted and reported findings in Chapters Five and Six. In addition, researchers published two journal articles to report findings on how Business Studies teachers integrate diverse innovative pedagogy in the classroom to enhance teaching and learning.

4.8 Trustworthiness

Trustworthiness is a fundamental aspect of qualitative research. It assists in ensuring the validity and reliability of findings. In the context of the study titled ″Innovative Digital Pedagogy: A Case Study of Digitally-Enhanced Business Studies in Grade 12", trustworthiness was established through strategies such as triangulation, member checking, and maintaining a detailed audit trail to ensure that the findings accurately reflect the participants' experiences. This suggest that trustworthiness was critical to ensure that findings accurately reflect the integration of digital tools into Business Studies lessons in rural schools. This section addresses the four key components of trustworthiness, namely: transferability, credibility, confirmability, and dependability. Rule and John (2011, p. 107) contend that trustworthiness promotes "scholarly rigour, transparency and professional ethics"

4.8.1 Transferability

Transferability refers to the ability to transfer and generalise research findings into another setting or context (Cohen et al., 2018). Bitsch (2005, p. 85) maintained that "researchers facilitate transferability judgement by a potential user through thick description and

purposive sampling". In this current research, transferability refers to how far results can be transferred to other school situations (especially rural education) where technology-based implementation is being considered. While Harry Gwala District was the subject of this study, how can the findings be applied to other similar environments where digital pedagogy is implemented? For transferability purposes, the researcher provided a thick description to gain rich contextual knowledge of participating schools, socioeconomic background, and specific educators' dilemmas of rural education (Creswell & Creswell, 2018). By providing a detailed description of school landscapes, technologies used (e.g., smart-boards, projectors), and how teachers have applied digital technologies to classrooms, the study might help other researchers and teachers if the findings are transferable to other rural environments.

4.8.2 Credibility

Polit and Beck (2017) define credibility as the assurance that research findings are true and realistic. Drawing from this definition, this suggests that research findings should be more believable by representing original participants ' views (Martens, 2018). In this study, credibility meant whether the results accurately reflected participants' experiences with incorporating digital tools in their Business Studies classroom. In this research, credibility played a major role because the researcher sought to capture the authentic experiences of rural teachers who might not be familiar with digital technologies such as smartboards and online platforms. Member checking was used to increase the credibility of the study. Upon conducting semi-structured interviews and lesson observations, the researcher returned transcripts or summaries of the findings to the participating teachers, thereby verifying the voices of those teachers (Shenton, 2004).

This was crucial for a study where the use of digital tools was explored, as teachers can clarify errors in their understanding and ensure that the data captures how they struggle and succeed with integration of diverse innovative pedagogy (Creswell & Poth, 2016). Long-term participation was another approach that was followed to ensure the researcher had enough time to engage with teachers. This makes it possible for researchers to observe more in their digital tool usage over multiple lessons and contexts, creating a more authentic data collection (Creswell & Poth, 2016). This study also relied on triangulation of data from interviews and lesson observation and compared them to note their consistency.

4.8.3 Confirmability

Confirmability refers to the degree to which data generated from participants is correctly interpreted by reflecting participants' viewpoints, not researchers' biases (Polit & Beck, 2017). Lincoln and Guba (1985) contend that in qualitative research, confirmability is achieved by using multiple data collection techniques and audit trail. In other words, confirmability ensures that the conclusions are drawn from participants' experience and are not from the researcher's point. This study argued that validity is an important issue because the researcher needed to be confident that the interpretation and findings were grounded in real teachers' experiences about the integration of digital tools in their classrooms. To ensure confirmability, in this research, a thorough audit trail was needed. This involved capturing each phase of the research process, from initial data collection through interviews and lesson observations to the data analysis at the end (Lincoln & Guba, 1985).

Next, researchers make use of triangulation to verify the findings as cross-verification between data from multiple sources, which helps eliminate the possibility of the influence of researcher bias (Flick, 2018). For instance, if the teacher mentioned that she was struggling to integrate smartboards, the researcher backed this up with lesson observations about how the smartboards are actually used in the classroom. This ensured that the information provided was valid and reliable.

4.8.4 Dependability

Dependability refers to the reliability of research findings, even if a study is repeated with similar participants over a period (Polit & Beck, 2017). Similarly, Bitsch (2005) describe dependability as the stability of research findings over a specific period of time. This suggests that if a study is repeated, similar findings should be obtained. In this research, crystallisation was used to give multiple views to the research challenge. Through different data generation instruments such as semi-structured interviews and lesson observation, researchers get the opportunity to create a fuller picture of how digital technology is incorporated into Business Studies lessons.

To sum up, trustworthiness is essential to ensuring the value and validity of a qualitative study. The trustworthiness measures are provided through thick description, member checking, triangulation, and an audit trail in the case of digital-enhanced teaching in Business

Studies (Grade 12). Therefore, the four dimensions of trustworthiness, namely transferability, credibility, confirmability, and dependability, contribute to making sure that the research has a solid basis.

4.9 Ethical considerations

Ethical considerations are necessary for all kinds of research. Cohen et al. (2018) assert that ethics involves principles that are sensitive to the rights and dignity of other people. Jamrozik (2004) argue that it is crucial to obtain ethical clearance from gatekeepers when conducting research that includes human beings. This study considered all principles of ethical research as required by the University ethics committee. The following ethical principles were considered in this research study.

4.9.1 Permission

Before embarking on this study, the researcher applied for ethical clearance from the UNISA Ethics Committee to conduct the research and an ethical approval certificate was obtained in April 2024 (refer to Appendix A). After that, the researcher applied for permission from the KZN Department of Basic Education (DBE) to conduct research in their jurisdiction schools. Permission was obtained from KZN DBE (refer to Appendix B). After obtaining approval from KZN education, principals and participants were contacted, and permission was granted. All participants were provided with consent letters, which explained more about the purpose of the study. This step was necessary to confirm the participant's availability. Participants were also informed about ethical issues pertaining to the research, such as voluntary participation, anonymity, confidentiality and free to withdraw anytime if they wish to do so.Confidentiality and anonymity

Bertram and Christiansen (2014) contend that it is important to keep participants' information confidential. To maintain confidentiality and anonymity, the researcher respected the rights and privacy of participants. In this research, the real names of the schools and participants were not used; instead, pseudonyms were provided to protect the identification of participants. Data generated from participants were kept private and confidential by the researcher and supervisor in a safe place at the supervisor's office. Thereafter, data was destroyed after a period specified by the university. Essentially, participants were not forced to disclose information that was confidential to them.

4.9.2 Data storage

For data storage, the researcher stored hard copies of data in a locked file cupboard at the supervisor's office for a minimum of five years after submitting the results. Electronic data was stored in a password-protected computer for safety purposes. Researchers also take reasonable technical and operational steps in ensuring that data records are stored in such a manner.

4.9.3 Limitations of the study

The sample size of this study comprised a small number of Business Studies participants from Harry Gwala District, in KwaZulu-Natal; therefore, the sample size may not represent the perspectives of all secondary school teachers in the province. This suggests that the findings of the study cannot be generalised to all schools across KwaZulu-Natal.

4.9.4 Conclusion

This chapter presented and described the research methodology and design adopted in this study. The chapter commenced by describing the interpretive paradigm and qualitative approach and justifying its suitability for this current study. Thereafter, the case study research design was discussed and explained why it was suitable for this study. The research sampling, such as purposive and convenience sampling, was explained. Moreover, this chapter discussed the data generation procedure, including semi-structured interviews and lesson observations. The chapter concluded by discussing how data was analysed, the ethical considerations, as well as how trustworthiness was assured by detailing how principles of transferability, credibility, dependability and confirmability were maintained. The next chapter presents data analyses from data generated from the participants.

Chapter 5

Data Presentation, Analysis and Discussion of Findings

5.1 Introduction

The previous chapter outlined research design and methodological approach adopted by the researcher to address the main research question, “What innovative pedagogies do teachers utilise to enhance teaching and learning of Business Studies Grade 12?”. This chapter examines data that was generated through semi-structured interviews with six Grade 12 Business Studies teachers on the research site. Moreover, data analysed was guided by Conversational Theory by Laurillard (2002) and Engagement Theory by Kearsley and Schneiderman (1998) to shed light on how teachers integrate innovative pedagogy to enhance the teaching of Business Studies. In addition, thematic analyses were used to code data generated and to categorise patterns that emerged from participants' viewpoints into themes and sub-themes. Braun and Clarke (2019) assert that thematic analysis assists researchers identify meaning, common themes and categories from data produced by participants in order to address research questions. Data generated from participants were transcribed, and verbatim quotes were used to convey participants’ viewpoints.

5.2 Research Context

The research study was conducted in secondary schools in Harry Gwala District in KwaZulu-Natal. This district is one of the deep rural districts in the province and comprises three Circuit Management Clusters (CMCs), namely Ixopo CMC, UMzimkhulu CMC, and Pholela CMC. Each CMC has four circuits under its jurisdiction, which are managed by circuit managers who were previously known as ward managers. Regardless of the geographic location of this district, both rural and semi-urban schools were selected due to the availability of resources to integrate innovative pedagogy to enhance the teaching of Business Studies. The selected schools comprise learners from different socioeconomic statuses, and these schools benefit from the National School Nutrition Programme (NSNP) to provide learners with a feeding scheme.

Moreover, schools varied from Quintile 2 and 3 due to their socioeconomic status. As a result, five schools are categorised as no-fee-paying schools, while one remains a low-fee-paying school. All these schools start from Grades 8 to 12, and learner enrolments range from 950 to 1350. The number of enrolled learners in Business studies in the selected schools has continuously increased since some of these schools offer Business Studies in both the commerce and humanities departments to improve the quality of Grade 12 results. Business Studies classes vary from 30 to 55 learners per class, and most learners opt for the subject, as it is considered the easiest subject compared to other commercial subjects. These schools are categorised as school A, B, C, D, E and F. Table 5.1 below elaborates on the school background of participants in this current study.

5.2.1 School details summary

Table 5.1 Summary of background of sampled schools

School name	School type	Quintile	Learner enrolment	Fees/no fee	Digital tools available
School A	Public	2	1200	No fees	Computers, data projector and whiteboard
School B	Public	2	1300	No fees	Computer laboratory and whiteboard
School C	Public	2	1350	No fees	Computer laboratory and data projector
School D	Public	3	950	No fees	Laptop, data projector and whiteboard
School E	Public	3	1100	No fees	Data projector and whiteboard
School F	Public	3	1260	Low-fee paying	Computer laboratory, library and tablets

5.3 Demographics of the participants

Table 5.3 below presents a brief synopsis profile of study participants. The actual names of the participants and their schools were not disclosed. The participants' psydonyms were P1, P2, P3, P4, P5 and P6.

Table 5.2 Summary of participants' profiles

School Name	Participant Name	Gender	Age category	Qualifications	Major subjects	Teaching experience
A	P1	Female	35-40	Bcom & PGCE	Business Studies & EMS	14 years
B	P2	Female	25-30	BEd	Business Studies & EMS	8 years
C	P3	Female	40-45	Master of Education	Accounting, Economics and EMS	18 years
D	P4	Male	40-45	B.A & PGCE	Economics	20 years
E	P5	Male	25-30	BEd Honours	Business Studies and Technology	10 years
F	P6	Male	35-40	BEd Honours	Accounting and EMS	12 years

5.3.1 Summary of research questions, themes and sub-themes

This section presents summary of themes and sub-themes that were generated during data analysis and interpretation. See Table 5.3 below.

Table 5.3 Themes and sub-themes that emerged from data

Research questions	Themes	Sub-themes
1. What digital tools do teachers utilise to enhance the teaching of Business Studies Grade 12?	Digital tools	PowerPoint, Social Media, interactive white board, Laptops, and Tablets
2. How do teachers integrate digital technology into their instructional design to enhance the teaching of Business Studies Grade 12?	Integration of digital tools	Lesson design and content delivery Communicating with learners Enhance self-directive learning. Encourage critical thinking
3. What are teachers' experiences with the affordances of digital technology that enhance innovative pedagogy in Business Studies?	Affordances of digital technology	Student-centred learning Flipped learning Collaboration and interactive learning Assessment and Feedback Innovations Access to resources.
4. What professional development opportunities are available to Business Studies teachers to enhance their use of innovative pedagogy?	Professional support	Training on Digital Tools Workshops and Seminars on Innovative Pedagogy Collaborative Learning and Peer Support. Continuous Professional Development (CPD) Programmes Mentorship and Coaching Access to Online Courses and Resources

5.4 Discussion of themes

This section presents and discusses data that was generated through thematic analysis. Common phrases and patterns containing similar meanings were grouped together and formed the themes for this study.

5.4.1 Theme one: Digital tools

Digital tools play a crucial role in modernising educational practices and enhancing teaching and learning processes (Johnson & Samora, 2016; Mucundanyi, 2019). This emphasises that the rise of digital tools has made significant changes in the education sector in meeting learners' needs. Koehler et al. (2013) assert that teachers cannot depend on a single digital technology to solve teaching and learning challenges. Furthermore, Mucundanyi and Woodley (2021) concur that numerous digital tools are used to transform how educational institutions operate. To shed more light on digital tools, Moran (2017) indicated that digital tools comprise a wide range of software, platforms, and digital devices that can transform traditional classrooms into dynamic learning environments. This emphasises that the utilisation of digital tools in teaching and learning has altered traditional educational techniques by creating environments that prioritise student interaction, incorporate visual learning elements, and focus on learner-centred education. On the other hand, Dancsa et al. (2023) confirm that the implementation of digital tools, such as laptops, interactive whiteboards, PowerPoint presentations, YouTube videos, data projectors, simulation games, and mobile applications, has established dynamic learning environments that help learners better understand abstract concepts.

Nevertheless, Aljenaibi (2015, p. 48) argue that “digital technologies are transforming the learning environment not only to provide exciting new learning tools but to meet the changed literacy needs of learners.” Therefore, the application of digital tools in modern education has moved beyond viewing technology as an optional teaching aid and now recognises it as an essential element within curriculum delivery and student engagement. In light of this, several studies highlighted that the usage of modern technologies nurtures essential 21st-century abilities like critical thinking, problem solving and digital literacy, which are vital in teaching Business Studies as learners need to grasp fast-paced economic changes and

technological advancement (Sithole, 2012; Gcabashe, 2024). Consequently, it is recommended that Business Studies teachers possess knowledge on how to integrate digital tools in the classroom to enhance learners' academic performance. This echoes Meyer's (2009) observation that the incorporation of multimedia tools and interactive elements assists teachers in delivering theoretical frameworks with greater clarity and offers learners opportunities for practical application exploration to enhance understanding and engagement.

Moreover, according to Sabri et al. (2024), digital tools boost learners' engagement and understanding while simultaneously making teaching and administrative duties easier for teachers. Sumadevi (2023) suggested that digital platforms like Google Forms, WhatsApp, Flipgrid, and Microsoft Teams enable more efficient management of lesson planning, content delivery, assessment, and student feedback processes. However, the successful implementation of technology in education depends on both teachers and learners possessing digital literacy skills, as well as dependable access to technology and internet services. Hirata (2006) argues that teachers should receive adequate professional development to integrate technology successfully in the classroom. Kumi-Yeboah et al. (2021) contend that digital tools enable continuous learning environments outside the classroom by promoting learners' reflection on their learning paths through peer discussions and access to online resources. As a result, basic technologies such as WhatsApp and Facebook still enable teachers to teach effectively even in poorer environments. In addition, social media platforms serve as valuable digital tools in education, enabling learners to engage with content, industry experts, and each other in a familiar and interactive setting. To support this, Ahmad (2024) pointed out that teachers can leverage these platforms to share relevant information, such as videos, resources and also encourage learners to engage with the subject matter outside the traditional classroom setting.

Despite the numerous benefits, the integration of digital tools in education faces challenges, particularly regarding equitable access. Warschauer (2004) argue that the digital divide remains a significant barrier, with learners in underprivileged or rural areas often lacking access to reliable internet and digital devices. This disparity can hinder the effectiveness of digital learning tools and exacerbate educational inequalities (Warschauer, 2004). This study suggests that efforts to integrate digital tools into education must be accompanied by initiatives to improve digital infrastructure and access for all learners. Moreover, this shows that the successful integration of digital tools in education requires teachers to possess not

only technical skills but also pedagogical expertise in leveraging these tools to enhance teaching and learning. Moreover, Dlamini and Mbatha (2018) affirm that professional development opportunities focusing on educational technology are crucial for teachers to stay abreast of new tools and methodologies. Similarly, Ertmer and Ottenbreit-Leftwich (2010) argue that professional development should not only cover the technical aspects of digital tools but also include strategies for their effective pedagogical application, ensuring that technology integration enhances rather than distracts from the learning experience. The following sub-themes examine the specific educational applications of digital tools that enable teachers to transform lesson delivery while promoting collaborative learning and connecting theoretical knowledge with practical application in Business Studies classrooms.

5.4.1.1 Sub-theme one: PowerPoint Presentation

Generally, the majority of participants stated that they use PowerPoint presentations for the delivery of interactive lessons. However, their responses seem to be mixed on how they integrate it for content delivery. P1 from school A indicated that it assists her in simplifying abstract subject concepts for better understanding. She explained,

"I use a laptop connected to a projector, which allows me to make use of a PowerPoint presentation. It makes it easy for me to design and communicate information with learners and to design different assessment tasks. It also allows me to share multimedia content such as videos, graphs and images, which are more useful to get learners' attention. All these digital tools make it possible for students to grasp information and understanding of different concepts easily".

The assertion by P1 demonstrates that PowerPoint presentations and projectors enable her to deliver structured and visual lessons that resonate with learners' learning preferences. According to P1, the use of multimedia content such as graphs and images ensures that abstract concepts become more tangible for learners, making learning more accessible and effective. In support, Baker et al. (2018) pointed out that the use of PowerPoint presentations provides an opportunity for engagement and an interactive learning environment where learners can visualise concepts rather than relying solely on text-based instructions. It further transpired from participant responses that PowerPoint presentations enable P1 to move away from traditional teaching practices by incorporating multimedia elements into lessons. This view suggests that the use of multimedia elements has significantly enhanced learners'

engagement and conceptual understanding in Grade 12 Business Studies. This echoes with Xingeng and Jianxiang (2012), who affirm that PowerPoint presentations enable teachers to deliver more information compared to chalkboard writing in traditional classrooms. However, this may be different from each school due to the availability of digital tools. A PowerPoint presentation is a digital tool, not teaching pedagogy. In contrast, Cruz (2013) argues that both traditional teaching approaches and modern approaches are effective for teaching and learning processes. Therefore, it is recommended that teachers not focus solely on PowerPoint presentations all the time and also consider traditional methods as well.

Similarly, P2 in school B raised the same sentiments as P1 in school A by arguing that PowerPoint presentations enable her to visually display lessons for effective learning and understanding. She briefly clarified,

"For effective teaching, I use PowerPoint to summarise information. This digital tool helps me to create a visualised presentation, and learners pay attention through demonstration".

Proponents such as Nawale and Nawale (2022) maintain that PowerPoint presentations transform teaching and learning, and they benefit both teachers and learners in class. This means that teachers should know which lessons require a PowerPoint presentation, because if it is excessively used, it may result in boredom among learners. Correspondingly, Zhao (2007) affirms that teachers can use PowerPoint to attract learners' attention by illustrating information to them. Correspondingly, Alkash and Al-Dersi (2017) concur that PowerPoint presentations assist both teachers and learners due to their unique features, such as text differences, tables, drawings, and text of different colours.

At the beginning of the lesson observation, I noted P2 playing a video to get the learners' attention. From the author's point of view, PowerPoint presentations provide educators with various strategies to explain content. Since all learners use technology constantly in their day, the idea of integrating digital tools into the teaching process in schools is becoming increasingly interesting. Conversely, critics like Musa (2023) caution that PowerPoint presentations may not be effective due to equipment failure, such as finding out that the projector is not working as required, and also the corruption of files from laptops may prevent the presentation from taking place as planned. Unfortunately, during my lesson observation, I witnessed P2 using a PowerPoint presentation at a minimal level due to disturbance from load shedding. These observations gave the researcher the idea that teachers experience numerous

challenges pertaining to the integration of innovative pedagogies for teaching and learning. Therefore, this study maintained that the remedy in this case is to develop backup plans.

P3 stated diverged views with P2 and P3. He believes that PowerPoint presentations provide an opportunity for brainstorming and critical thinking, which are essential skills in subjects like Business Studies. In our discussion during interviews, P3 stated,

"PowerPoint slides are most effective in my classes because learners get the opportunity to brainstorm various ideas together and solve subject-related problems. Learners are competitive since there is an element of creative thinking, they get quick, live feedback from one another, and from the teacher".

With reference to the above, P3 pointed out that PowerPoint presentations provide an opportunity for sharing ideas, leading to creative thinking in class. This is more essential due to the rapid changes in the educational landscape during the 21st-century. Currently, the world demands integration of digital tools in preparing learners with the skills necessary for life beyond the classroom. This means that critical thinking and collaboration are recognised as essential competencies for success in modern education and society.

From the researcher's point of view, teachers must therefore design learning experiences that develop these skills, integrating problem-based learning, collaborative projects, and the use of digital tools into the curriculum. Supporters like Baker (2018) have portrayed that PowerPoint presentations enable teachers to structure the material rationally, such as incorporating graphs and photos to provide explanations to different types of learners. Through this practice, it becomes easier to solve subject-related problems through visualisation. Furthermore, this was consistent with the participant's observation, as I witnessed P3 connecting the data projector to the laptop in order to display PowerPoint slides. Thereafter, he switched on PowerPoint slides, which resulted in a discussion as learners responded to the questions asked by the teacher. All questions were based on the previous day's lesson.

Additionally, the researcher noted that PowerPoint presentations make lessons more interesting and enjoyable, as learners were challenging each other with questions and providing each other with immediate feedback. Drawing from the literature, Hashemi et al. (2012) argue that PowerPoint presentations encourage interaction in class, enable learners to

become more engaged with the content they are learning, and also receive immediate feedback from their peers and teachers. This suggests that teachers should consider using PowerPoint presentations for collaboration and active learning in the classroom.

On the other hand, proponents such as Kearsley and Schneiderman (1998) caution that teaching and learning are complex; therefore, effective engagement should occur in class to increase collaboration. They further stated that learners should work in pairs to solve subject-related problems and report back to their group. Similarly, conversational theory places a critical priority on learner autonomy. Pask (1980) supported that learners should actively participate in their learning with personal ownership of their learning as well as through self-directed inquiry. Laurillard (2002) concurs with other scholars that discussion should empower learners, allow them to ask questions based on their interests and look for new information. This approach entails the promotion of intrinsic motivation and a sense of control over the process of learning, which is pivotal in ensuring continued engagement and lifelong learning (Pask, 1980).

On the other hand, P4 argued differently, stating that PowerPoint slides are not only used for content delivery but also for transforming theory into practice. He argued,

"When I was teaching corporate social responsibility, I created slides where there was a video of how different companies handle corporate social responsibility, and then I had embedded questions throughout the video. Learners were expected to think about what they had learnt in light of the theory that we talked about in class over the previous few days. It was a great discussion, and the class was more engaged."

These sentiments illustrate the effectiveness of PowerPoint presentations in transforming theory into practice. The process of listening to and watching practical examples of corporate social responsibility promotes critical thinking, and learners get the opportunity to evaluate the relationship between theory and practice. P4 believes that embedded questions further enable learners to reflect on their past knowledge and encourage deeper engagement and meaningful discussions among learners. This approach not only simplifies content but also encourages learners to apply theoretical knowledge to real-world scenarios, enhancing their analytical and problem-solving skills.

5.4.1.2 Sub-theme two: Social media

Before understanding how social media operates, numerous scholars have described social media in different ways. Ralph and Ralph (2013, p. 451) describe social media as "a group of Internet-based applications 'interactive platforms' that build on the ideological and technological foundations of Web 2.0 that allow the creation and exchange of user-generated content.". The above definition highlights that social media can be used for content creation. In this way, content creation on these platforms may take place through videos, pictures, and voice sharing. From the researcher's point of view, this definition implies that people may use social media for various purposes, including the dissemination and sharing of information or news. Ahlqvist et al. (2008, p. 13) argue that social media focuses on three crucial elements, which include "content, communities and Web 2.0.". Furthermore, Rautv and Patil (2016) and Patmanthara et al (2019) assert that social media is widely used by both teachers and learners in the education sector because it gives them the power to interact and share information across the world. These platforms include Facebook, YouTube, Twitter, LinkedIn and WhatsApp. They further highlighted that learners typically use social media platforms for a variety of purposes, such as entertainment and educational purposes.

Similarly, Ajani and Gamede (2020) shared a common understanding with other scholars and assert that social media platforms serve as valuable digital tools in education, enabling learners to engage with content, industry experts, and each other in a familiar and interactive setting. They added that teachers can leverage these platforms to share relevant articles, videos, and discussions, encouraging learners to engage with the subject matter outside the traditional classroom setting. In addition to the above, Rautv and Patil (2016) agree that social media can provide insights into current market trends, consumer behaviour, and business strategies, making the learning experience more relevant and engaging. Therefore, there is no doubt that social media builds a network between people from different communities in the world. Table 5.4. below presents an overview of popular social media platforms that were formulated between 1994 and 2010 adopted from (Dhingra & Mudgal 2019)

Table 5.4 provide overview of popular social media platforms that were formulated between 1994 to 2010 as adopted from (Dhingra & Mudgal 2019)

Year	Social media	Description
1994	link.net	This is a website on which posts are published on a regular basis and displayed in reverse chronological order.
2003	LinkedIn	A social network platform that enables professional employers to post jobs via the internet and job seekers to apply for employment through the internet.
	Myspace	A social network website designed to connect friends, personal profiles, groups, videos and photos and submitted by users.
2004	Facebook	A social network website that allows registered users to send or receive messages, videos and photos online. It further promotes interaction between friends, colleagues and family members.
2005	YouTube	A social media platform that permits users to post videos online and also to watch videos posted by other users.
2009	WhatsApp	An instant messaging system that permits its users to send messages, text, photos, videos and audio recordings through the internet. Its users should download Apps either on mobile phones, PC or Tablets.
2010	Intergram	Social media is a platform that permits users to send videos and photos to other users.

Consequently, Hutchens and Hayes (2014) caution that social media has both positive and negative impacts on learners' learning and academic performance. Lottering (2020) contends that social media plays a crucial role in improving learners' interest as well as critical thinking skills. This implies that learners who are reluctant to speak in the classroom might express their thoughts freely on social media. On the other hand, Madge et al. (2009) warned that social media platforms such as Facebook should not be used for formal learning purposes due to their complications. Furthermore, Manca and Ranieri (2013) suggested that learners may

be distracted when they check social media updates while studying. Therefore, it is important to take precautionary measures before considering the utilisation of social media. Participants highlighted that they use social media for critical thinking and engagement purposes.

5.4.2 Types of social media used by participants

Participants further revealed that they use different social media platforms to share and communicate information with learners. Among the social media platforms that were mentioned by the participants are WhatsApp, Facebook and YouTube. Participants also highlighted that they use these digital tools for learners' engagement, to bridge the gap between theory and practice, for collaborative learning and discussion, and for sharing teaching and learning support materials.

5.4.2.1 WhatsApp

During our interviews, P3 in school C indicated that she uses WhatsApp groups to share teaching and learning support material and also to engage with learners after school hours. This includes assigning activities to learners and also addressing learners' queries about the subject. She described,

"I employ a WhatsApp group to get student engagement and easy communication. In this way, I post previous question papers and homework to improve my deep learning ability. Thereafter, they can also see and comment on their classmates' posts, which fosters some great dialogue."

It is clear from P3 responses that WhatsApp demonstrates the effectiveness of social media platforms to extend learning beyond the classroom. Laurillard (2002) asserts that online discussion and collaboration platforms that encourage continuous interaction among learners via dynamic conversations are more essential for effective teaching and learning. Several studies revealed that WhatsApp benefits teachers and learners in terms of academic performance (Susilawati & Supriyatno, 2020; Motaung & Dube, 2020). To support this, Udenze and Oshionebo (2020) argue that WhatsApp provides learners with the opportunity to respond to questions, share examples, and engage with each other's posts. In short, this platform facilitates collaborative learning and active participation in a digital platform. Venter (2021) affirms that WhatsApp equipped learners with collaborative skills, which are

more essential for modern society. For instance, Majola (2020) highlighted that collaboration between learners is beneficial in subjects like Business Studies, as it helps learners understand the dynamics that occur in business environments.

In support of the above, Dewing (2010) indicated that WhatsApp promote interactive, dialogue and collaborative discussion between learners, family and friends. This means that WhatsApp play a crucial role in keeping learners engaged with their teaching and learning activities. Similarly, Ajani (2021) asserts that WhatsApp provides an opportunity for continuous dialogue, allowing quieter learners to contribute their ideas comfortably, while also enabling peer-to-peer learning through the sharing of information and constructive feedback from one another. Further to the above, the data from the participants' responses indicated that teachers use WhatsApp to achieve the common goal of supporting teaching and learning, as well as improving the quality of teaching and learning. This is in line with Gcabashe (2024), who postulates that recently, teachers use WhatsApp to share teaching and learning resources with learners. This, therefore, suggests that learners may access learning materials regardless of their geographical location for a better understanding of subject content.

Another strength of WhatsApp includes its flexibility and applicability across different disciplines and educational contexts. In light of this, social media can be adapted to various subjects, grades, and learning environments. For instance, teachers can apply this digital tool in science education, language arts, mathematics, or social studies to deepen learners' learning and understanding. Kearsley and Schneiderman (1998) argue that Engagement could not occur if technology is not integrated into teaching and learning. In essence, the Engagement Theory serves as both a guide for current educational practices and a roadmap for future exploration and innovation in the field of educational technology.

Despite WhatsApp's strengths, it is not without limitations. Several studies have highlighted that it negatively impacts learners' learning and performance (Chavan, 2018; Gcabashe, 2023; Mtaung & Dube, 2020). Conversely, critics like Yeboah (2014) argue that procrastination is a big challenge related to the utilisation of WhatsApp, as learners tend to spend more time on this platform chatting with friends without considering the amount of time wasted. This negatively impacts the learner’s performance. Another criticism of WhatsApp concerns that some students may be left behind in WhatsApp group discussions due to limited internet

access (Jere et al., 2019). For instance, this may create inequality among learners who reside in underprivileged locations.

5.3.2 Facebook

On the other hand, P4 stated that he uses social media platforms like Facebook for collaborative learning and discussion as students become active on social media. He further stated that Facebook enable him to post activities for learners. He shared,

"Brainstorming can be particularly effective when done via an online platform such as Facebook. Facebook groups have been effective for creating collaborative learning environments. Learners discuss topics, share insights, and even post questions that extend classroom discussions. This impacts positively on learners' performance."

The excerpt from P4 indicates that he uses Facebook to facilitate brainstorming and dialogue amongst learners. This is in line with Hoi and Hang (2022), who affirm that Facebook promotes student engagement for better understanding. This insight shows that Facebook allows P4 to share school activities with learners and extend learning beyond the classroom, resulting in critical thinking and problem-solving. Therefore, through Facebook, teachers can assign informal activities to learners anytime. Moreover, P4 believe that this digital platform makes it easier for learners to interact with each other and contribute meaningfully, creating a sense of community. In addition, P4 responses demonstrate that Facebook has a significant impact on learners' academic performance, as it serves as a tool for entertainment and engagement. Greenbowe (2009) asserts that Facebook promotes interactive learning, resulting in affective communication and engagement. This is supported by Neo et al. (2013), who stated that learners' engagement is essential to strengthen face-to-face classroom teaching, and virtual activities should be integrated. They further stated that virtual platforms, such as social networking sites like Facebook, Twitter, and MySpace, increase learners' engagement. In this study, the utilisation of Facebook enables Business Studies teachers to facilitate brainstorming and reflective dialogue with learners.

Shahzad and Bilal (2019) argue that through engagement and discussion on Facebook, critical thinking and problem-solving may be promoted. Nevertheless, critics such as Busalim et al. (2019) argue that Facebook has a negative impact on learners' performance. Siddiqui and Singh (2016) highlighted that inappropriate information may be posted on Facebook,

leading to distraction from learners, and it may be difficult for educators to monitor learners who are not paying attention. Despite using Facebook, P2 shares a similar sentiment with P4, although she was not clear about the type of social media she employs in her Business Studies class. However, she mentioned that she relies on social media to create an inclusive environment that promotes collective contribution from her learners. In this way, all students get the opportunity to share subject knowledge with other learners. She elaborated,

"Sometimes I post something on social media, then request them to log in and share their views. Learners love looking at posts and reading other learners' thoughts. And it's collaborative, and it gets some learners who wouldn't normally put their hands up, to actually contribute."

P2 revealed that by sharing information online, learners who are typically hesitant to speak in traditional classroom settings are provided with the opportunity to express their thoughts freely. This highlights that Facebook promotes a comfortable classroom climate. This is in line with Greenhow and Askari's (2017) findings that social media promotes soft skills such as communication and collaboration, which are crucial for workplace performance.

On the other hand, besides enhancing student engagement, P5 shared similar insights that social media enables him to connect with learners online and share learning content. He noted,

"Social media has been incredibly effective for engaging learners because it allows me to post questions after school hours. The learners like being able to interact with each other."

Based on P5 responses above, it is clear that social media supports collaborative learning and problem-solving, as learners can exchange information, ask questions, and provide feedback in a more relaxed digital environment. As P2 stated, engagement is very important in creating a supportive and inclusive learning environment. Learners can also feel connected with each other through the use of digital tools such as social media platforms, online discussion forums and virtual study groups, even when studying remotely. For instance, peer interaction and support can be enhanced by teachers through the use of social media platforms like Facebook, WhatsApp, where learners share information related to school activities or come across common assignments that are due on the same day.

5.4.3 YouTube

In comparison with other participants, P3 shared her reliance on *YouTube* videos for demonstration and explanation of abstract concepts. She asserted,

"I use YouTube for illustration of concepts and for practical demonstration; I usually upload the videos and allow learners to watch. After that, I asked questions to check understanding. For my kids, it's great for learning."

P3 sentiments show that YouTube serve as a valuable tool for practical demonstration in her classroom. Proponents such as Srinivasacharlu (2020) assert that *YouTube* videos simplify theoretical content by presenting practical, related examples. Furthermore, Almurashi (2016) asserts that *YouTube* comprise a variety of content that can be useful for effective teaching and learning. Thus, Al-Hammouri et al. (2022) argue that *YouTube* serves as a valuable resource in modern teaching, as it offers access to real-world business scenarios and case studies for content-specific explanations. Moreover, Kay (2020) contends that *YouTube* videos encourage active learning by giving learners time to think and reflect on the subject content. This method was noted on P3 observation as learners were active in answering questions. In this way, teachers have the opportunity to comment on students' learning progress.

Further to this, Mayer (2001) concurs that learners are most effective at learning if they take things from both visual and auditory sources actively. They add that by including questions in videos, educators get the learners to think about what they have just read and discuss fundamental concepts in order to construct new knowledge. This highlights the importance of incorporating videos for teaching and learning. On the other hand, scholars such as Gikandi et al. (2020) warned that it is not always easy to use digital tools. Correspondingly, Payton (2010) cautions that digital literacy remains an obstacle to teachers, as the dependency on *YouTube* resources can be problematic since the content itself cannot be trusted. In support of the above, Mucundanyi and Woodley (2021) argue that some YouTube videos are privately owned and people can only access the video once authorised by the owner.

In contrast, P1 concurs with P3 and stated that she uses *YouTube* videos to explain the subject concept. Therefore, in this manner, learners are able to construct meaning from what they have learnt through visual observations. She clarified,

"One other useful way to create dynamic lessons is with YouTube clips. It seems that learners are able to analyse difficult subject concepts, like quality of performance, much more easily with a visual explanation than just text, and are usually able to connect theoretical concepts to the real world of global corporations. Learners then tend to be far more engaged in classroom discussions."

Expanding on this, P1 further explained that,

"Yes, I recall about a year ago, we were studying forms of ownership, which is hard for the learners to grasp, especially in paper two. So I used YouTube to show an animated video demonstrating this. Now the learners enjoy the topic and are asking good questions. They are even giving examples of local companies that they know that would fit into the idea about success and failure of businesses, and we are having a good practical discussion about it."

Correspondingly, P3 expressed similar sentiments and maintained that *YouTube* videos allow learners to observe practical examples. She asserted,

"Yeah, I was doing packaging and advertising under marketing activities. I found different YouTube videos of advertising campaigns like the Starbucks campaign or UNICEF. Seeing photos of the products and their packaging, and then physically moving objects to show how they would be used, seemed to really bring the idea to life. And it seemed like the learners were making connections to what we had talked about and how theories play out in the real world."

From the above extracts, the educator demonstrated that *YouTube* promote contextual learning in Business Studies. Nasution (2019) asserts that *YouTube* can be used to motivate learners to concentrate in class and to reinforce concepts that have been acquired in class. Similarly, supporters like Fleck et al. (2014) maintained that using YouTube videos enables learners to pay more attention and develop their memory. Datskiv (2020) affirmed that when educators visually illustrate concepts, learners can gain a clearer understanding and start applying their knowledge to real-world examples. This seems to be a more essential skill in practical subjects like Business Studies. Killen (2015) concurs that learners benefit when educators give them examples that relate to their contextual lives. Thus, this study argues that *YouTube* videos serve as a key for practical demonstration, as they allow learners to actively engage with subject content, share their insights, and identify relevant examples from their

communities. This correlates with Bhattacharjee and Deb (2020), who argue that online videos contextualise learning by involving learners in the context. They further maintained that when learners see things through real examples, they are more easily taught and engaged in classroom discussion (Bhattacharjee & Deb, 2020).

5.4.3.1 Sub-theme three: Interactive whiteboard

On the other hand, P5 acknowledge that interactive whiteboards enable him to deliver visual presentations and to assess student progress based on information that has been presented to them. He commented,

"In my Business Studies classes, I mainly use interactive whiteboards for the delivery of content and to assign informal assessment tasks. Through this, you can easily communicate with learners and view their progress."

P5 further stated that interactive whiteboards serve as powerful tools for capturing learners' attention and interest. He explained,

"I guess I was teaching unethical business practice and professional business practice. In this lesson, I used an interactive whiteboard to display images directly from the computer, to watch videos and to get the attention and focus of learners. After presenting the lesson, I gave them a group activity and asked them to choose a company to identify challenges that may be posed by unethical and unprofessional business practices to the business."

These findings were consistent with Clark et al. (2021), who argue that interactive whiteboards facilitate active learning because they allow teachers to create hands-on lessons that involve learners with visual, auditory, and tactile content. Moreover, the results affirmed the establishment made by Glover et al. (2020), who pointed out that whiteboards facilitate teaching by giving teachers the power to combine online learning, exercises, and live feedback.

5.4.3.2 Sub-theme four: Laptops, tablets and projectors

Apart from the above, P6 explained that he used multiple tools to simplify content and to identify new pedagogical teaching strategies. He remarked,

"I use a laptop connected with a data projector and whiteboard as the central hub of sharing resources and communication with the learners. It works brilliantly for putting up all staff on my laptop, such as assignments, notes, past exam papers, marking guidelines, and lesson planning."

The participant's response demonstrated that digital tools streamline administrative tasks and support an interactive teaching approach with learners. It is evident from these responses that smartboards and laptops are essential tools for sharing resources and lesson planning. During lesson observation, I witnessed P6 using a laptop linked to a projector and smartboard to share research, past exam papers, and exam guidelines with his learners. However, some learners were not participating in the class discussion. P6 further stated that he used desktop computers for group work, which accommodated all learners, including those who are typically reserved about contributing. He explained,

"Desktop computers allow learners to work in smaller groups, promoting collaboration and making sure everyone has an opportunity to participate, even those who are usually quiet in larger groups."

This view is contrary to Berkeley Kearsley and Schneiderman (1998, p. 21), who argue that "engagement theory promotes interaction, but human interaction in the context of group activities, not individual interaction with an instructional program. This study highlights that smaller group settings promote collaborative learning and ensure that learning becomes distributed as learners' shared experience. This suggests the role of technology in ensuring inclusive collaboration and providing equal opportunities for all learners to engage meaningfully.

Further to this, P6 mentioned that digital tools assist him in downloading educational material to maximise learners' participation in class. He said,

"I've been using tablets that were supplied by MTN, and they allow me to download subject-related case studies and scenarios in my lessons."

Further to this, Lopez et al. (2020) assert that with laptops as planning aids, teachers can plan full lesson plans involving multimedia elements where the learners can access the content in a variety of ways.

5.5 Analysis of emerging themes

Generally, participants' responses highlighted how digital tools have enhanced the teaching of Grade 12 Business Studies. PowerPoint, YouTube, interactive white board, data projectors, tablets and social media allow teachers to create interactive, user-friendly, and student-centred learning spaces. It emerged from this sub-theme that when educators employ multimedia materials and interactive tools, they facilitate engaging learning activities based on critical thinking, engagement, and a better understanding of complex topics. Bourbour (2023) concurs that digital tools such as interactive whiteboards and projectors enhance visual learning and allow teachers to present complex business concepts and data analysis in an accessible manner. Therefore, this view suggests that digital tools are not only a great teaching aid but also prepare learners for the world we are living in, which is digital and connected. It was clear from participants' responses that resource access was the primary factor driving digital integration in the classroom. This insight resonates with Hargreaves and Fullan (2012), who assert that for effective ICT integration, access to resources and institutional support is crucial. Sithole (2012) elaborates that the integration of digital technology in teaching Business Studies enables learners to master business concepts and practical experience that is essential in the business world.

The findings from participants' perspectives pointed out the ways that digital tools enable engagement and critical thinking in Business Studies lessons. Moreover, there is a gap in the CAPS document that is unclear on how teachers should use digital tools to support effective teaching and learning. However, it was evident from participants' responses that teachers employ PowerPoint, social media, WhatsApp, and desktop computers to make learning not just fun, but also give students the opportunity to collaborate and share content knowledge. Therefore, this study advocates that digital tools play a crucial role in supporting teaching and learning, as well as improving student engagement in schools. Most importantly, these digital tools dissolve the traditional barriers and enable even reluctant learners to share their thoughts, while encouraging a culture of participation and discussion.

With these digital tools, teachers can create engaging classrooms where learners can collaborate, reflect, and relate theory to practice. Furthermore, participant experiences reflected how PowerPoint presentations and social media provide participatory learning. Participant experiences provided insights into how digital tools help to fill in gaps left by

traditional teaching methods. For example, WhatsApp and Facebook will allow quieter learners to communicate, which will make them more inclusive and involved. Greenhow and Askari (2017) contend that mobile communication apps such as WhatsApp and Facebook enable learners to engage with each other remotely by sharing information and responding to each other's work. Therefore, this reveals the importance of social media in supporting teaching and learning. Greenhow and Askari (2017) further stated that social media invites learners who might be hesitant to speak in class to participate in a shared space in which all voices are welcome. Roberts and Rees (2021) assert that the internet creates collaborative learning communities where learners can share ideas, pose questions and engage in longer discussions. This aligns with what she stated, that she normally posts activities on social media and invites learners to engage with them. This corresponds with Manca and Ranieri's (2019) findings that social media platforms encourage peer learning and reflective practice by engaging in dialogue and sharing knowledge.

It is noted in the literature reviewed in Chapter Three that PowerPoint presentations, social media platforms and desktop computers offer the learners the possibility to interact with content. Prince (2020) suggests that digital-driven active learning methods create increased learning because they make learners engage with information and with each other. Therefore, in this way, teachers open the door for interaction and discourse, enabling learners to become more engaged in building knowledge than they have been previously. In addition to the above, Hrastinski (2019) asserts that online learning environments are an alternative for learners to discuss and participate in group work, allowing learners to work in groups and making learning available and fair to all learners. Ultimately, this study shared that digital tools are used in supporting critical thinking, dialogue and collaboration. This implies that such tools transform classroom practice into student-centred practices of active learning and collective ownership. Although obstacles like technology access remain, participants' responses highlighted the value of digital resources to facilitate meaningful and participatory learning spaces that better prepare learners for the real world.

By incorporating a wide range of digital tools, teachers can ensure that lessons remain fresh and engaging. This diversity method not only captures learners' attention but also reinforces their retention of the material, making the learning experience both enjoyable and effective. Based on lesson observation, learners' reactions confirm how digital tools transform the classroom. These technologies have not only made learning interactive and open, but have

also helped create an inclusive learning culture. With the special affordances of technology, teachers can boost motivation among learners and make challenging concepts easier. With reference to the above, participants' experiences highlighted the importance of digital technology for linking theory with practice. This suggests that the use of digital content (e.g., YouTube videos, simulation games and interactive whiteboards, survey tools) is now an integral part of linking content to practical use in education.

5.6 Theme two: Integration of digital technology

As the world becomes increasingly digital and relies more on science and technology, the integration of digital technology has transformed the teaching profession, enabling teachers to enhance their classroom teaching practices. Several scholars argue that this transition enables teachers to create innovative lessons, encourages learner participation, and provides access to a diverse range of resources, resulting in successful teaching and learning (Alarmri et al., 2022; Hernandez et al., 2022; Nhlumayo & Pule, 2025). In the same way, Dave (2019) confirms that digital technology has transformed traditional teaching practice through digital learning. This suggests that the integration of digital technology in teaching and learning opens up new possibilities for both teachers and learners. Furthermore, Pereira Júnior et al. (2017) maintained that the use of online learning platforms enables learners to expand learning opportunities beyond their immediate geographic and socioeconomic status. This view echoes with Pinto and Leite (2020), who argue that the expansion of digital technology has made education more accessible by opening doors for teachers and learners to access high-quality educational resources for responsive learning construction. These authors further highlighted that various types of digital tools are available for teachers, including PowerPoint, YouTube, social media, Prezi, and Quizlet, which assist in catering to multiple learning styles.

Nevertheless, Janssen et al. (2019) argue that digital tools can be incorporated in the classroom to support content delivery. This suggests that teachers must possess knowledge of technology in order to teach effectively. More recently, at a local level, Gcabashe (2024) examined the integration of ICT by Business Studies teachers to provide Grade 12 learners with important business skills required in today's businesses worldwide. Interestingly, the study found that ICT integration assists teachers in equipping learners with critical business skills such as creative, problem-solving, communication and entrepreneurial skills. This corresponds with Ghavifekr and Rosdy's (2015) view that the integration of technology helps

learners develop creative activities, resulting in collaborative learning skills. In this way, it becomes easy to generate innovative ideas to solve subject-related problems. Correspondingly, Xu et al. (2023) pointed out that technology facilitates collaborative learning and problem-solving, leading to critical thinking from learners. The following section explains how teachers integrate digital technology into their instructional design to enhance the teaching of Business Studies Grade 12.

5.6.1 Theme one: Digital technology is used in teaching Business Studies

This theme focuses on how participants integrate digital technology to design teaching of Grade 12 Business Studies. Surprisingly, data generated through lesson observation and interviews revealed that participants integrated digital technology in a variety of ways to support the teaching of Business Studies. This includes keeping learners active in class during lesson presentation, communicating information and engagement. In addition, it appeared that Business Studies teachers use digital technologies and social media platforms to convey information to learners. YouTube, WhatsApp, PowerPoint, and a data projector.

5.6.2 Sub-theme one: Simplifying abstract concepts

It appeared from P1's response that technology tools such as PowerPoint slides and YouTube enable her to project notes instead of writing notes on a traditional chalkboard. This suggests that technology supports effective learning compared to tradition. Consequently, P1 further mentioned that digital technology plays a crucial role in breaking down abstract subject concepts, making them more concrete. This suggests that digital technology provides learners with opportunities to engage with concepts in a more concrete way. She alluded,

"Yes, I recall. About a year ago, we were studying forms of ownership, which is challenging for learners to grasp, especially in Paper Two. I was planning a lesson on this, and I was having trouble figuring out the best way to explain factors that contribute to the success or failure of forms of ownership. I used PowerPoint slides to project notes and key concepts, as well as YouTube to show an animated video demonstration. Thereafter, learners were enjoying my presentation and were asking good questions. Even shy learners were able to give examples of local companies that they know that would fit into the idea about success and failure of businesses, and we had a good practical discussion about it".

From the above response, this assertion illustrates that P1 integrate technology to demonstrate subject content in order to improve student academic performance and subject-related knowledge. For instance, by using PowerPoint slides to summarise key concepts, the lesson begins with a clear and organised overview that highlights the theoretical aspects of forms of ownership. The addition of short videos enhances the lesson by providing real-world examples, making the content more relatable and engaging for learners. It is therefore essential for educator to use digital technology in achieving their pedagogical objectives. Moreover, the combination of digital tools and hands-on activities ensures that learners not only understand the theory but also apply it practically for deeper learning. This suggests that the incorporation of these tools into Business Studies classrooms offers a dynamic way to teach in a methodical, visual, and experiential manner for various styles of learning, as well as to help learners to understand difficult ideas and concepts. These observations are consistent with previous research showing the efficacy of technologically enhanced teaching to produce experiential learning environments (Grogman et al., 2025). Moreover, proponents such as Bhattacharjee and Deb (2020) maintain that the integration of multimedia tools in one lesson makes it easier for learners to understand concepts and apply them in real-world scenarios. From the author's point of view, this study believes that digital technology increases engagement and makes the lesson more interesting for learners who receive information from educators.

Similarly, P2 agree with P1 and reported that digital technology is integrated to support learners' learning capacity and increase motivation. He further emphasised that it makes the lesson interesting and learner-centred. She explained,

"For effective lesson delivery, whiteboards, laptops, and data projectors work well for me. They allow me to present multimedia content in a more engaging way. , and learners tend to be more responsive to dynamic lessons."

The above responses highlight that digital technology empowers teachers to present dynamic and interactive lesson which captures learners' attention and enhances their responsiveness. For instance, data projectors and laptops make videos and animations accessible to the classroom, which gives a complete learning curve for the learners. To support this view, research by Becta (2020) found that multimedia can support teaching and learning because it allows teachers to deliver content in a variety of ways to accommodate different learning

needs. In the same vein, research by Maurice (2024) highlighted that the adoption of diverse digital tools enables educators to transfer subject knowledge easily to learners. During lesson observation, I noted P2 effectively incorporated multimedia content to create lessons that were visually stimulating and more engaging. Therefore, this suggests that digital technology helps learners understand key concepts. Because of this reason, this study assumes that digital technology plays a crucial role in teaching and learning, supporting innovative pedagogies that encourage active participation. From P2's response, it can be assumed that digital tools make the teaching and learning process more enjoyable and effective for learners. The above views resonate with Hattie (2018), who maintains that learners learn better when technology is integrated into teaching because learning becomes more visual and interesting.

Moreover, P5 maintained that he uses PowerPoint presentations to enhance learners' understanding, as this digital tool focuses on summarising key facts for learners and sharing information, thus,

"I used PowerPoint presentations to explain the concepts of ethics and professionalism. I showed some YouTube videos about real companies and the issues they had to deal with related to ethics and professionalism. After that, I asked questions about what learners thought about when they heard about 'ethics and professionalism' using departmental notes from my laptop. There was a brainstorming session where everybody in class contributed."

Continuing from Chapter 2, visual and auditory evidence is a way of transferring theories to practice by offering practical demonstrations of advanced concepts (Greenhow et al., 2008). This is what P5 did using YouTube videos to illustrate ethics and professionalism.

In addition to the above, P5 cautions that it is essential to consider the advantages and disadvantages of digital tools before integrating them into lessons. He held,

"However, I don't think that teachers should only rely on digital tools, as we used to experience different challenges in class, such as power failure and technical problems."

5.6.3 Sub-theme two: Active and collaborative learning

Diverging from other participants, P3 asserted that she utilises digital technology to promote active and collaborative learning. P3 had the following view about the integration of technology for active and collaborative learning. P3 claimed,

"*Okay, so, for example, when I was teaching human rights, inclusivity and environmental issues. I start the lesson with an overview of the topic by using a recording that I made a few years ago (Slides). After that, I then play a short video based on human rights, diversity issues and health and safety from YouTube. At the end, I stop the video and then get learners to jot down in their notebook what they think the key point about the topic is before moving on. Then I split them into small groups, assigning a task to identify diversity issues from businesses, attached pictures and gave a short description of each picture".*

With reference to the above, P2 believes that digital technology assists her in designing effective lessons that promote active learning and engagement. This suggests that learners have the opportunity to brainstorm what they have learnt in class. Jamieson-Procter et al. (2013) contend that ICT integration enhances teaching and learning processes, resulting in active learning in class. Several studies affirm that the integration of technology enhances teaching and learning and learner engagement in classroom contexts (Lai & Bower, 2020; Bhat, 2023). During the classroom observation, learners were noted working in pairs, seeking assistance from each other. In short, learners participated in a common task, trying to solve the problem together. Therefore, the above extract highlights that P3 utilises pre-recorded lessons and videos to simplify her lessons, which assist in differentiating learning to accommodate all learners in class.

Similarly, P2 explained that he adopted simulation games to support the teaching of Business Studies. This, therefore, assists in achieving collaboration. She said,

"I found a sim game where you could go online, and I asked them to identify types of strategies from virtual business examples, and then watch how they affected the market. Having the learners play in pairs and then discuss their strategy with another table made this game-based activity enjoyable and made it much easier for them to understand."

Once again, the participant's response indicates that gamification is used as a strategy to enhance engagement and collaborative learning. Essentially, by incorporating simulations and interactive games, learners are provided with real-world scenarios that allow them to experiment with different strategies and observe their outcomes. The task of identifying strategies and discussing their effects with peers promotes teamwork, critical thinking, and dialogue among learners. Such activities turn learning into an enjoyable and practical experience while also fostering communication and group collaboration, essential skills for subjects like Business Studies. This correlates with Vygotsky and Cole (2018), who argue that learning should occur through social interaction since knowledge is constructed through communication and collaboration. In support of the above, Brown and Race (2019) argue that immediate feedback provides formative feedback to learners because it helps them identify areas where they lack knowledge, and educators adapt their teaching style to correspond with learners' needs.

5.6.4 Sub-theme three: Creation of an inclusive learning environment

On the contrary, the data highlighted that P4 seem to be opposite from other participants as digital technology enables him to incorporate innovative ways of teaching approaches in order to cater for the diverse needs of learners. He elaborated,

"PowerPoint slides make my lesson to accommodate all learners in my classroom. Through PowerPoint slides, I create graphs or drawing diagrams to illustrate content for easy understanding".

From the P4 perspective, digital tools such as PowerPoint slides are considered advanced digital technology that assist in designing lessons that meet diverse learners' needs and abilities. According to P4, digital tools ensure that teaching and learning are diverse. This highlights that learners learn better when technology is integrated into teaching and learning. Proponents such as Van der Kleij and Adie (2018) argue that technology allows instructors to adapt a variety of learning styles, making it more accessible and inclusive.

5.6.5 Sub-theme four: Access to resources and communicating information

Participants' responses showed that Business Studies educators integrate technology in the curriculum to get access to resources as well as to communicate important information with

learners. As a result, P1 commented that smart boards enabled her to share videos, graphs and images in order to illustrate information. She elucidated,

"With a smartboard, I get the opportunity to share multimedia content such as videos, graphs and images. Students can attend the lessons, and I can also record the class for absent learners".

Therefore, the above participant's response highlights the transformative role of multimedia tools in enhancing accessibility and inclusivity in education. In short, smart boards not only provide a platform to deliver engaging visual content but also ensure that learning is not limited to learners physically present in class. Recording lessons allows absent learners to keep abreast with the curriculum coverage, reducing the learning gap and ensuring continuity. Moreover, the ability to incorporate various multimedia elements such as videos, graphs, and images enables teachers to present content in ways that appeal to diverse learning styles, fostering better understanding and retention among learners.

Similarly, P4 concurred with the sentiments shared by P1 and asserted that he utilises multimedia resources to provide learners with practical examples. He mentioned,

"I also use a data projector and YouTube to show them real-life examples of how the subjects we are discussing relate to the real world. This assists in developing learners' understanding"

It is evident from the preceding discussion that the integration of data projectors and YouTube videos enhances lesson delivery by providing learners with visual representations of real-world business scenarios. Therefore, this suggests that these digital tools enable teachers to present authentic examples. The main issue is that these digital tools help Business Studies learners to understand how to apply theoretical content to practical situations. As reflected in Chapter Two, this approach promotes critical thinking, as learners are encouraged to analyse and reflect on the challenges faced by businesses and relate them to the content being taught in the classroom environment. Therefore, by linking lessons to real-life applications, multimedia tools foster a deeper understanding and a more meaningful learning experience.

On the other hand, it transpired from lesson observation and interviews that participants use digital technology to access teaching and learning resources from education websites using the Google search engine.

During interviews, P5 noted the following,

"An interactive whiteboard is my main platform for effective teaching and learning. It allows me to connect to the internet in order to access a wide range of resources such as video scenarios and case studies."

From the data, interactive whiteboards serve as a crucial tool for integrating multimedia content into lessons. Therefore, by connecting to the internet, teachers access different learning resources such as videos, case studies, and interactive simulations. This study maintained that these resources provide learners with opportunities to explore concepts from multiple perspectives, fostering creativity and critical thinking. Further to the above, the interactive nature of whiteboards also allows teachers to engage learners in collaborative activities such as analysing video scenarios or solving case studies as a group. This approach promotes active learning and encourages learners to take ownership of their learning process.

Sharing the same sentiments, P6 asserted that digital technology enables him to access a wealth of resources in order to prepare learners for formal assessments. He clarified,

"I normally use technology to download notes and past papers from other provinces using Google search engines….This helps my learners in preparing for the examination as they need to be exposed to different questions before they write a formal exam".

The above statement indicates that P6 integrates digital technology in Business Studies to prepare learners for summative assessments, such as common tests and examinations. In other words, this suggests that digital technology results in deep learning. This echoes Xhuraj et al. (2023), who contend that technology helps both teachers and learners access information more quickly and accurately. As the world is moving more digital, Xhuraj et al. (2023) reiterated that search engines and e-books play a crucial role in supporting teaching and learning, and they seem to be replacing traditional textbooks. However, critics like Voogt et al. (2015) caution that teachers should have a basic understanding of how technology tools operate to integrate technology effectively in teaching and learning processes.

In light of this, recent studies have reflected that digital technology has the potential to transform education practice worldwide (Nurhidayat et al., 2024; Alhassan, 2024; Raave et. Al., 2024). It emerged from data that participants integrate social media platforms to increase communication between learners and teachers. Researchers, such as Mbodila (2025), have indicated that the rapid growth of social media in society has made it possible to extend the learning process beyond the classroom and foster cooperation among learners. Similarly, Esan and Esan (2025) affirm that WhatsApp enable learners to share knowledge and learning materials with other peers. During our interviews, P6 reported that he utilises social media to increase learners' involvement and to convey important information about learning. This teaching approach enables learners to post and record messages for their peers, making learning more interactive. P6 expressed him as follows,

"I used WhatsApp groups to share various activities while learners are at home, and I strongly believe that WhatsApp is a good tool for checking student understanding as well as communicating information".

Learners get the opportunity to share and discuss information about their learning.

The above sentiments highlight that WhatsApp strengthens the relationship between educators and learners as it encourages engagement and communication through digital platforms. In return, this helps Business Studies learners to improve their communication and writing skills. More recently, supporters, including Raharjo et al. (2025), argue that WhatsApp can be used by both teachers and learners to support online learning. On the other hand, research by Mbodila et al. (2025) criticised WhatsApp for having a negative impact on student learning, as it distracts them from effective learning. However, from the researcher's point of view, this does not imply that WhatsApp should not be incorporated to support teaching and learning.

Generally, participant responses reflect the importance of multimedia tools in cultivating creativity and critical thinking in Business Studies classrooms. Participants' findings indicated that YouTube, interactive whiteboards, data projectors and social media are some of the digital technologies that can help teachers to present visually and interactively lessons. For example, P1 indicated that smart boards enable her to share multimedia resources in order to enhance lessons. Therefore, multimedia applications bring subject theory into real

life through authentic examples and case studies for Business Studies learners. As highlighted in the literature review, this is most crucial since Business Studies learners are required to provide a practical example from their essay in section C. Furthermore, P4 noted that the incorporation of YouTube videos in Business Studies lessons helps teachers to illustrate content and active participation. Videos, pictures and multimedia learning aids allow multiple entry points for learners of different learning abilities. This view resonates with Mayer (2021), who claims that multimedia tools promote understanding by linking words and images together to facilitate cognitive thought.

It is also clear from participants' experiences how technology enables knowledge transfer between theory and practice. In supporting the above, Laurillard (2012) argues that multimedia technologies create lived learning experiences through connecting theory with real-world examples. Similarly, Bates (2020) pointed out that multimedia case studies provoke thought and enable learners to apply learning in a practical way. In making these concrete connections, multimedia resources allow learners to take knowledge from the classroom and apply it to real-life situations.

Nevertheless, Jonassen et al. (2020) assert that multimedia can support constructivist learning environments in which learners become the authors of knowledge. This also resonates with Dede (2018), who notes how multimedia tools foster experiential learning where learners 'learn by doing' and 'introspectively reflect on their learning experience'. Therefore, it is clear from participants' responses that digital technology offers differentiation and adaptability. Meaning every student can learn through the adoption of technology. Despite the benefits of access to different resources, Selwyn (2016) argues that teachers from underprivileged schools might have problems integrating technology due to a skill shortage. This corresponds with Mbatha (2020), who asserts that continuous professional development should continue to enhance teachers with technological. This study suggests that these obstacles must be addressed in order for teachers to understand how to integrate technology in the classroom to improve teaching and learning in subjects like business studies.

5.7 Theme three: Affordances of Digital Technology

As highlighted in Chapter Two, numerous studies pointed out that technology affordances have a significant impact on transforming education and enhancing teaching and learning

(Conole & Dyke, 2004; Dlamini, 2018; Moll et al., 2018). This suggests that digital technology has radically transformed the educational landscape, offering unprecedented opportunities for interaction, accessibility, and personalisation. These affordances enable teachers to design a learning environment that is more engaging, as well as inclusive, and offers learning experiences that cater to the diverse needs of learners. To support this, Maulet et al. (2024) claimed that educators should integrate digital technology in the classroom to create a learning environment that promotes innovative pedagogy, creative, and critical skills, which are more required for the 21st century. For instance, the cognitive affordances of ICT support the development of higher-order thinking skills through interactive simulations, digital games, and problem-solving activities. From a researcher's point of view, digital technology assists in solving complex problems in a contextualised manner and encourages learners to apply critical thinking in order to find better solutions.

5.7.0 Innovative teaching practice

The affordances of digital technology in education offer opportunities to enhance teaching and learning, fostering global connections and preparing learners for the challenges of the 21st century (Leus, 2022). This theme presents participants' experiences about the affordances of integration of digital technology in teaching Grade 12 business studies. Although participants have divergent responses, it was evident from the data generated that participants employ digital technology to support innovative teaching practice. This suggests that the teaching and learning of Business Studies was influenced by digital technology. Furthermore, data from participants revealed that the affordances of digital technology are to provide Business Studies educators with the opportunity to incorporate various teaching approaches to enhance learning. These teaching approaches include learner-centred learning and self-directed learning. In this study, the researcher believes that technology provides teachers with the opportunity to rethink their teaching methods before designing a learner-centred environment. In addition, the majority of participants seem to have a positive impression of the impact of digital technology on their instructional practice. Table 5.3.1 provide sub-themes for affordances of digital technology in teaching Grade 12 Business Studies.

Table 5.5 sub-themes for affordances of digital technology in teaching Grade 12 Business Studies.

Affordance of digital technology	Example of digital tool used by teachers
Digital technology supports learner-centred learning	PowerPoint, YouTube, Smartboard
Digital technology supports Self-Directed Learning and Peer Feedback	Google Forms and WhatsApp
Digital technology saves time for teachers	ChatGPT, Laptop, Microsoft Teams and WhatsApp
Digital technology is used for assessment	YouTube, Interactive whiteboard, WhatsApp, Google Forms and PowerPoint

5.7.1 Digital technology supports learner-centred learning

It appeared from interviews that digital technology supports the transition from traditional teaching practice to learner-centred learning in which learners actively participate in the process of teaching and learning. As a result, participant 1 (P1) noted that digital technology enables learners to participate in various activities and create a learning environment that promotes reflection and collaborative discussion. She reflected,

"Digital technology has actually given me an opportunity to be more learner-centred in my teaching… I'm not necessarily the person talking to learners for an hour. I'm spending a lot more time actually designing how they are working together. How are they being learner-centred learners? How are they doing with class activities using digital tools? How are they doing discussions? And how are they going to solve problems together?"

Based on participants' comments, it is evident that technology has helped P1 transform her pedagogical practices from a traditional teacher-centred to a learner-centred method. This indicates that technology integration modified the traditional teaching of Business Studies teachers. Based on interview responses, P1 incorporated various digital tools that promote deeper collaborative and interactive learning experiences in class. This suggests that P1 no

longer serves as the primary source of knowledge instead, she guides learners through the teaching and learning process. This resonates with Kumar and Mamgai (2023), who contend that technology integration enables educators to serve as facilitators guiding learners through digital resources. Furthermore, the emphasis on classroom activities, discussions, and problem-solving tasks demonstrates how digital tools support learners in independently exploring Business Studies concepts while also promoting teamwork in class. P1 further indicated that technology enables learners to take charge of their own learning through participating in various activities designed to strengthen critical thinking. This suggests that technology supports both independent learning and the development of critical thinking skills necessary for practical, real-life situations. In supporting this perspective, Hennessy et al. (2021) argue that digital technology creates opportunities for learners to take an active role in the teaching and learning process by engaging with their peers. Concurring with the above views, America and Skelly (2021) said that Business Studies is a practical subject that requires teachers to incorporate real-world examples in order to prepare learners for the demands of the business environment. In light of this, it becomes clear that teachers could use different technological tools, such as YouTube, to present and demonstrate Business Studies content. The exposure to practical videos could help learners understand complex subject content. This means that digital technology could play a crucial role in teaching Grade 12 Business Studies.

Similarly, Participant 2 (P2) echoed the same sentiment as P1 and raised the point that digital technology has helped her shift towards learner-centred learning. She remarked that digital tools encourage learners to learn from one another, making the classroom more engaging and interactive. She explained,

> *"Digital technology has definitely made me more learner-centred in my role; I see myself as much more of a 'guide on the side' than the 'sage on the stage', and activities where learners can discover, create and share, whether that's video-making or collaborative spaces. Sometimes, I use various tools for my formative assessment."*

In summary, the shift to a "guide on the side" role is a key feature of learner-centred learning, where learners actively engage in their own learning process rather than passively receiving information. In support of this, Opoku-Asare (2014) cautioned that the overuse of the lecture method can lead teachers to rely heavily on a "chalk and talk" approach, which reduces

learners to passive recipients of information. On a more positive front, the inclusion of video-making and collaborative spaces illustrates how digital technology offers diverse opportunities for learners to create content, exchange ideas, and collaborate with peers. This aligns with the findings of Laurillard (2019), who argues that learners can learn from one another anytime and anywhere.

Furthermore, P2 believes that learner-centred learning enhances creativity and collaboration among Business Studies learners while also empowering them to take ownership of their own learning. In support of this, Smith (2024) maintains that technology does not replace the work of teachers, but it plays a crucial role in supporting learners' engagement in class. The integration of technology in formative assessment enables P2 to provide quick feedback, ensuring that learning remains dynamic and responsive to individual students' needs. This confirmed that P2 used a learner-centred approach in teaching business studies. During lesson observation, P2 attempted to provide constructive feedback to learners in class. However, she did not mark all the students' exercise books, particularly those of learners seated at the back of the classroom. Upon our discussion after the lesson, she explained that she typically collects exercise books and marks them during her free time, as marking learners' work in class proves to be challenging.

In addition, Participant (P4) expressed similar views to the other participants and affirmed that integrating digital technology has enhanced his ability to present content using multiple resources, thereby addressing diverse learning styles. He further emphasised that technology creates opportunities for collaborative learning within the classroom, thus,

"Technology has helped make my lessons more learner-centred. I used to spend a lot more time teaching learners, but now my role is more of a facilitator. I use digital tools to present my information in different ways, and the activities I do with learners allow them to work with the material and with each other."

From P4 perspective, digital technology enables the presentation of Business Studies content using multimedia resources, which in turn makes lessons more engaging and accessible to a diverse group of learners. In support, Xie et al. (2019) and Kowitlawakul et al. (2022) affirm that numerous technological tools are used to support learner-centred learning, and they benefit both teachers and learners. Therefore, by designing activities that require learners to

interact with their peers, teachers can promote the development of critical thinking skills in class. This approach aligns with the facilitator role, which emphasises guiding learners through their learning process, allowing them to construct knowledge through exploration and peer interactions, rather than relying solely on the educator.

Concurring with the above, Li and Ding (2023) maintained that a learner-centred teaching approach benefits learners in developing social and personal skills. Du Plessis (2020) stated that it assists in improving communication and cooperative skills. However, although P4 acknowledged that digital technology enhances student-centred learning in his Business Studies classroom, he identified a notable limitation, observing that not all learners actively participate in class discussions, which can hinder the effectiveness of the learning process. This insight highlights the challenge of ensuring equitable engagement in technology-based lessons. This was also notable during the researcher's observation, as P4 had a challenge interacting with all learners due to the large number of learners in class. This challenge was further confirmed when P4 asked questions based on the content taught the previous day. Surprisingly, all learners raised their hands, with some calling out "Sir" in an attempt to get the educator's attention.

In addition, the responses from the participants above resonate with the views of Participant 6 (P6), who stated that digital technology enables him to engage learners during the teaching and learning process. He explicated,

"Technology has made my lessons more learner-centred. Instead of being the only source of information, I act more as a facilitator. Digital tools allow me to guide learners through the various materials in a way that they actively engage with them, rather than passively receiving information."

Based on P6's response, this indicates the transformative role of digital tools in promoting student-centred learning. The active engagement facilitated by digital tools ensures that learners interact meaningfully with the content, making learning more interactive and participatory. This study found that P6 understands that he is not a master of knowledge but acts as an initiator of learning. By acting as a facilitator, P6 encourages learners to explore and interpret information independently, promoting a deeper connection with subject matter. However, this teaching approach requires teachers to invest sufficient time in preparing

lessons using digital tools in order to reduce talking time and create more opportunities for learners to actively engage with the content. The above findings indicate that P6 supports his learners by clarifying complex concepts using various digital tools.

5.7.2 Digital technology supports Self-Directed Learning and Peer Feedback

Findings from participants revealed that digital technology promotes self-directed learning, which enables teachers to provide learners with immediate feedback. Moreover, it also emerged that digital technology makes learning more engaging and enjoyable for both teachers and learners. During the interviews, it further appeared that teachers use digital tools such as Google Forms and WhatsApp to facilitate self-directed learning. This means that digital tools help learners to identify their strengths and areas needing improvement.

Participant 1 (P1) indicated that she employs Google Forms to design formative assessments aimed at promoting self-directed learning. These assessments typically consist of multiple-choice questions and are often distributed when learners are not physically present at school. Supporting this approach, Lim et al. (2023) emphasised that Google Forms can be an effective tool for administering assessments both inside and outside the classroom. P1 further explained that this teaching strategy not only enables her to track learners' progress but also encourages learners to reflect on their own learning, thereby fostering greater learner autonomy. She reflected,

"I created multiple-choice questions through Google Form using my laptop, which is perfect because you get instant feedback, and I can see which learners need more attention."

The responses above demonstrate that Google Forms is used as a catalyst to facilitate self-directed learning by enabling teachers to create activities that are automatically graded and provide immediate feedback. This immediate feedback allows learners to identify areas where they are struggling and focus on improving specific skills, promoting greater autonomy and personalised learning. This suggests that the integration of Google Forms in the teaching of Business Studies enables learners to become more aware of their own learning progress and encourages them to take greater responsibility for their academic development. In essence, P1 view Google Form as a support system that guides learners towards becoming more independent. However, concerns have been raised by postponement scholars, such as

Rao and Vani (2023), who argue that learners may receive assistance from family members when completing assessments outside of school hours. This, therefore, may hinder effective learning from home. Similarly, Shatri (2020) critiques the integration of technology for self-directed learning, suggesting that it may lead to academic dishonesty by making it easier for learners to cheat.

Participant 2 (P2) further highlighted another benefit of digital technology in promoting self-directed learning. She mentioned that WhatsApp has been instrumental in encouraging learners to take greater responsibility for their own learning. She explained that the platform enables timely communication, facilitates peer support, and provides a space for sharing learning materials, all of which contribute to increased student engagement and autonomy. She explained,

"I usually post questions on our WhatsApp groups and ask my learners to respond in order to give feedback to each other. So learners can also see and comment on the classmate's posts, which fosters some great dialogue."

From the participants' comments, it is clear that WhatsApp is not merely used as a tool for information sharing, but rather as a platform for creating an active learning environment. In other words, this digital tool encourages learners to learn from one another and engage in collaborative conversations that enhance their understanding and critical thinking. From the researcher's point of view, this type of asynchronous interaction supports self-directed learning as it allows learners to work at their own pace while benefiting from peer feedback and shared insights into understanding. In support of the above, Mbodila et al. (2025) argue that the key strength of WhatsApp is its ability to support independent learning, which often contributes more to personalised learning experiences. Correspondingly, Pane et al. (2015) assert that personalised learning means teaching according to the student's needs, so that they can progress in a self-directed manner. In short, WhatsApp allows learners to access learning content at their convenience, promoting autonomy and self-learning.

Participant 3 (P3) highlighted the accessibility and relevance of WhatsApp in supporting self-directed learning. She noted that the platform enabled learners to stay engaged outside the classroom, stating,

"So, I asked many of them if they have access to WhatsApp at home. As I suspected, having such access was helpful for them, as it allowed them to keep updated."

This suggests that consistent access to WhatsApp not only facilitated communication but also supported learners in maintaining continuity in their studies, contributing to independent learning. Through the use of WhatsApp groups, learners were able to engage with lesson content, ask questions, and receive timely updates, which further enhanced their learning experience and encouraged active participation beyond the classroom.

Similarly, Participant 6 (P6) emphasised the affordances of WhatsApp in providing personalised feedback. He explained.

"WhatsApp group allows learners to submit their draft work and for me to give feedback."

This approach highlights how digital platforms enable real-time submission and feedback, empowering learners to refine their work based on teachers' input. By submitting drafts and receiving comments, learners can identify gaps in their work and improve.

P6 added that, *"I also ensure I am available to answer questions, and encourage my learners to help each other."*

This collaborative approach promotes a supportive learning environment where learners can seek help not only from the educator but also from their peers. The availability of an educator encourages active learning where learners are proactive in seeking clarity and deepening their understanding. With reference to the above, when teachers use technology to give feedback, learning does not become a two-way information flow, but a dialogue. This suggests that learners are no longer passive recipients of information but active contributors to content discussion. This continuous approach increases learning and gives learners an active involvement in learning.

5.7.3 Digital technology saves time for teachers

Another emerging sub-theme regarding the affordances of incorporating digital technology in teaching was the ability of digital tools to help Business Studies teachers save time. Participants indicated that digital tools allow them to accomplish more tasks within a short period of time compared with traditional teaching methods. This efficiency enables teachers

to streamline lesson delivery, distribute materials quickly, and assess student understanding with minimal delay. More importantly, when digital tools are effectively integrated into the teaching and learning process, learners are able to cover more content within limited instructional time. This suggests that the use of technology not only enhances teaching productivity but also maximises learning opportunities for learners.

Participant 3 mentioned the role of artificial intelligence tools in enhancing the efficiency and creativity of lessons. She emphasised how digital technology assists her in reducing the time and effort required for preparing, thus,

"For lesson planning, I normally use ChatGPT, which helps me to design creative lessons. Instead of spending more time reading textbooks, I just upload the lesson topic and objectives on ChatGPT and receive feedback without spending much effort."

Her response suggests that incorporating ChatGPT helps teachers save time and effort for lesson preparation. As a result, they can prepare lesson plans quickly and more efficiently. Several studies have indicated that artificial intelligence assists teachers to enhance their professional practice (Gupta et al., 2023; Rahman et al., 2023; Grájeda et al., 2024). Thus, Rust and Whalen (2023) assert that ChatGPT helps teachers in preparing lesson plans, designing various assessments, and creating course schedules that are in line with learning objectives. According to Karaman and Goksu (2024), artificial intelligence, such as ChatGPT, provides educators with accurately generated lesson plans and saves time due to its flexible structure. However, concerns have been raised by Keiper (2023), who cautioned that ChatGPT does not always offer accurate solutions. This suggests that educators are expected to review and edit lesson plans constructed by ChatGPT.

Concurring with the assertions made by P1, P2 expressed that digital technology helps her to save time for lesson planning and delivery. She echoed,

"Technology makes it easy for me to prepare lessons, since I can download lessons from the internet and save them on my laptop for future reference. As an experienced educator, this makes my work simpler as I no longer spend much time preparing for lessons".

The above assertion suggests that digital technology enables P2 to search online for relevant content and reuse existing lesson plans in order to save time. Therefore, by gaining access to

digital technology, teachers can include media resources such as videos and simulations, which make it easy to clarify information through demonstrations. In the pre-digital era, teachers would spend time seeking out relevant content, physically preparing paper materials, and duplicating copies for many learners. In support of the above, Bates (2019) acknowledges that ICT tools save time on several aspects of the teaching process, from planning to delivery and assessment, while also increasing the effectiveness of pedagogy. Similarly, Johnson (2016) pointed out that teachers no longer have to spend time on producing printouts and the logistics of sharing subject resources, which enables them to focus on the quality of teaching and learning. This means that with digital technology, teachers have the opportunity to save more time and engage in reflective teaching.

Moreover, P3 noted that digital tools can also save time in terms of communication and administration. Platforms such as Microsoft Teams and WhatsApp enabled her to share announcements, homework assignments, and feedback with learners during lockdown. She added,

"During the lockdown period, I also used Microsoft Teams and WhatsApp for my remote lessons. These tools work better for me as I was able to communicate information with my learners and continue teaching. However, the challenge was data and internet connectivity for learners."

This suggests that technology saves time for teachers, since it allows teachers to contact learners outside of lesson time and outside of the school day. Greenhow and Lewin (2016) support this viewpoint and indicated that digital tools expand the realm of learning outside of the classroom, and the teacher can engage with learners without the constraints of the scheduled lesson. Thus, teachers can respond to questions or offer assistance outside of lesson time without cutting into lesson time. The accessibility and flexibility of ICT tools enable teachers to use their time more efficiently, particularly for teaching and other administrative activities. However, P3 noted that there were major barriers that prevented her from getting connected with all students from different contexts. Therefore, with reference to the literature, one of these barriers is the digital divide, which includes unequal access to the internet, devices, and electricity. This aligns with the research conducted by Warschauer (2004), who argues that the digital divide is not limited to the student population but extends

to teachers, affecting their capacity to effectively integrate ICT. This suggests that in schools that lack internet and electricity, the time-saving benefits of ICT are lost.

More recently, at the local level, Maphalala and Mncube (2022) describe the extent to which infrastructure constraints hinder ICT integration in rural schools. They point out that the schools do not have adequate ICT support, and thus many teachers are unable to utilise digital tools effectively. They further reported that teachers have a responsibility to make the decision on when to use digital tools in their professional practice. To overcome this challenge, Williams (2023) maintained that schools must have adequate digital infrastructure to help teachers effectively use technology in supporting teaching and learning.

In line with other participants' findings, P6 highlighted the benefits of digital technology in saving time during lesson delivery. He asserted,

"*Technology has simplified my work compared to my traditional teaching method. Now, I no longer write notes on a chalkboard because all my notes are saved on my PC, and this enables me to communicate and share notes with my learners"*

Participant 6 believes that digital technology saves him time. With digital tools, notes can be prepared and saved on digital storage devices, enabling teachers to move away from using traditional chalkboards. The response further suggests that digital technology not only saves teaching time but also enables learners to complete more tasks in a shorter period.

In conclusion, the incorporation of digital technology offers numerous time-saving benefits for teachers in various ways. Teachers can save time on planning, delivering, and assessing lessons, communicating with learners, and even on classroom management. However, as demonstrated by the reviewed literature, teachers' ability to save time depends on several factors, including the availability of technology, educator training, and professional development.

5.7.4 Digital technology is used for assessment

Assessment is a key element in teaching and learning, as it helps teachers evaluate learners' understanding and performance regarding what has been taught in class. It appeared during interviews that some participants frequently use digital technology to conduct different forms

of assessments. Participants focus on the use of Google Forms, PowerPoint presentations, interactive whiteboards, YouTube videos, and platforms like WhatsApp to produce various and student-centred assessment techniques. Therefore, these procedures are in line with the principles of innovative teaching, differentiated learning and the practice of critical thinking. P1 revealed that he uses Google Forms for learners' assessment. He explained,

"I use data projectors and YouTube videos for class presentations, then have learners reflect and answer questions based on what they learned. By doing that, I get the opportunity to assess various knowledge. I created multiple-choice questions through Google Form using my laptop, which is perfect because you get instant feedback, and I can see which learners need more attention."

The above statement revealed that digital technology enables P1 to implement diverse assessment strategies that cater for different learning styles. This means that the incorporation of digital technology helps teachers to accommodate different learners. This is supported by Katz and Earley (2021), who acknowledge that technology promotes inclusivity by allowing learners to engage in ways that are suitable for them. This further aligns with the findings of Wilson (2025), who maintained that the modern pedagogy encourages assessment that is not just traditional testing but includes formative, summative, and performance-based measures. Based on P1's comment, Google Forms provides a practical means of formative assessment by offering immediate feedback to learners. The instant results allow teachers to identify areas where learners struggle and adapt their teaching to address those gaps. In support, Black and William (2018) argue that formative assessment can drive better student learning because it gives honest feedback that guides learners about their academic performance. The fact that Google Forms tracks and reports on individual student responses goes hand in hand with this vision because it enables educators to identify learners' weaknesses. In the same vein, P3 confirmed that she integrates digital technology into design assessment. She alluded,

"I normally use interactive whiteboards for individual or group assessments during the course of teaching and learning in class, allowing learners to collaborate and present their findings on-screen. But we are not allowed to administer group assessment for formal tasks."

P3 response demonstrates that interactive whiteboards promote collaborative learning through group assessments. By allowing learners to present their findings on-screen,

educators can evaluate teamwork, critical thinking, and presentation skills simultaneously. However, the restriction on formal group assessments underscores a challenge teachers face in balancing innovative assessment strategies with institutional policies. Despite this, Chen et al. (2020) argue that digital tools like interactive whiteboards provide flexibility in conducting both formative and summative assessments that promote active participation in class. P3 noted,

"Google Forms is better for asynchronous assessment since it's more comprehensive and allows learners to work at their own pace."

The ability to conduct asynchronous assessments using Google Forms reflects how technology supports flexible and student-centred assessment methods. Therefore, in this way, learners can complete tasks at their convenience, which is particularly beneficial for those who may require additional time to process content. This self-paced approach caters to diverse learning needs and ensures that every student has an equal opportunity to demonstrate their understanding. Moreover, asynchronous assessments allow teachers to evaluate student performance comprehensively since this platform can track responses and analyse patterns of understanding across the class.

Similarly, P4 observed that PowerPoint slide design provides an opportunity to design a variety of assessment formats, including multiple-choice questions, scenarios, and case studies. She remarked,

"PowerPoint slides are helpful for assessing learners' understanding. I can set multiple choice questions, assignments, projects, case studies, and presentations. While WhatsApp groups are used for submitting and discussing homework."

Based on the response made by P4, digital technology facilitates differentiated assessment and enables educators to evaluate a range of skills, including knowledge retention, analytical abilities, research, and presentation skills. Furthermore, her response suggests that WhatsApp groups enhance this process by providing a platform for submitting different activities, such as homework. Through real-time communication, teachers can provide immediate feedback to clarify misconceptions. Unfortunately, during the lesson observation, the researcher noted that assessment in P4 was limited and that digital resources for assessment were not incorporated, as had been mentioned during the interviews. In practice, learners were

provided with printed handouts for assessment. However, based on the researcher's point of view, the assessment could have been more effectively conducted using PowerPoint slides following the lesson presentation. This suggests that educators lack sufficient knowledge on how to effectively incorporate digital technology in class to support teaching and learning.

In support of the above participants, P5 argues that Interactive whiteboards provide an effective platform for conducting live assessments during lessons. He summarised,

"I use interactive whiteboards for assessments during lessons, and I track student responses for constructive feedback."

Ultimately, participants' responses suggest that educators can display questions, scenarios, or problems and track student responses in real-time. This immediate feedback enables teachers to identify gaps in understanding and address them immediately, promoting a more dynamic and responsive approach to assessment. In addition, the ability to provide constructive feedback ensures that learners are aware of their progress and areas for improvement and promotes a growth-oriented learning environment. In summarising this sub-theme, as much as technology-based assessment may be good, there are issues of inequality in access to digital resources and digital literacy that must be addressed. As noted in the literature, the digital divide remains a barrier to fair assessment practices, especially in underfunded schools (Selwyn, 2016). This suggests that teachers find it hard to provide technological assessment if learners don't have access to good technology or the internet. Secondly, technology-based assessment depends on how well educators design meaningful tasks that align with learning goals. As a result, Xie (2017) pointed out that professional development needs to be given to teachers so that they are prepared and confident in applying digital devices in assessment.

The results from this sub-theme show that Business Studies teachers use technology for designing subject assessments. Findings of this study revealed that Business Studies teachers use a variety of Google Forms, PowerPoint, interactive whiteboards, YouTube videos, and WhatsApp groups to create flexible and different assessments for individual learning styles. Furthermore, findings show that technology helps Business Studies teachers to design formative and summative assessments that ensure that learners are kept involved and are continually supported throughout their learning process. Based on participants' comments, it

is clear that the digital divide and professional development for teachers are essential for integrating technology for assessment purposes.

5.8 Teachers' Continuous Professional Development

As noted in Chapter 2, numerous authors argue that teacher professional development is essential for all teachers, as it supports ongoing growth in pedagogical knowledge and practice (Department of Basic Education, 2018; Bradshaw & Lloyd, 2021). In support of this understanding, Bertram (2014) concluded that professional development encompasses various initiatives or activities designed to enhance teacher learning, including workshops and other training programmes. Professional development lead brings change in classroom practice, ultimately improving learners' academic performance. Various authors have described models for effective professional development. For instance, Kennedy (2005), Desimone (2009), and Engelbrecht and Ankiewicz (2015) identify nine models of continuing professional development: training, action research, cascading, transformative, coaching, mentoring, community of practice, award-bearing, and standards-based models. These models highlight the goals or objectives of professional development. Similarly, Desimone (2009) highlights five key features of effective professional development. Concurring with other scholars, Guskey (2002) argues that professional development should focus on both subject content and the skills that support student learning. In other words, professional development activities must address specific content knowledge, teaching skills, and pedagogical approaches to be truly effective. From the researcher's point of view, this perspective highlights the growing need for capacity building among teachers.

5.8.1 Sub-themes one: Training and support on Digital technology

The integration of digital technology in the classroom requires professional development and ongoing support for teachers. This theme reports findings on professional support and development available to help teachers develop the competencies to integrate technology in their classrooms. It emerged from data that professional development has become the key to successful integration of digital pedagogy, linking technology and practice. Participants reported attending a variety of workshops, webinars, and trainings to enhance their professional practice, which enabled them to deliver innovative lessons. Nevertheless, the majority of teachers mentioned that these meetings focus more on the technical aspects of digital tools rather than their integration into teaching and learning. It further emerged that not all teachers can apply their acquired knowledge to productive practice due to a lack of

adequate training. The second factor that emerged from the data was that the Department of Basic Education (DBE) offers professional support to teachers.

In support of the above, participants expressed that Districts and other private sectors offer various forms of assistance to teachers, ranging from infrastructure upgrades to technical assistance aimed at supporting the integration of technology in teaching Grade 12 business studies. Similarly, Matlala (2023) concurs that the DBE has implemented several professional development initiatives designed to support the integration of technology in teaching and learning. Furthermore, participants noted that some schools have established professional learning communities (PLCs), where teachers collaborate, share ideas, and brainstorm strategies for integrating technology into classroom practices. According to participants' responses, these communities are not just about building individual skills but creating an environment of collaboration and creativity. In this way, PLCs contribute to enhancing teachers' digital competencies.

Apart from initiatives mentioned above, participants revealed that free networks, such as social media groups, WhatsApp communities, and cluster meetings, enable them to interact, share resources, and learn from one another. In addition to support systems, some teachers reported that they learn from tutorials online, blogs, and YouTube videos when formal training is not available. However, to properly integrate technology into the classroom, teachers must receive appropriate training and support. Participants also mentioned that institutions do not provide adequate training and support; instead, they rely on their own initiatives to address issues related to the integration of technology in the classroom.

5.8.2 Sub-theme two: Department workshops

Participant one (P1) mentioned that she used to attend departmental workshops. However, she stated that, due to a lack of formal training, she relied heavily on learning from colleagues. This situation puts additional pressure on teachers and contributes to discrepancies in learners' learning. She elaborated,

"I have been to a few school workshops and district-organised sessions, which were mostly introductory, just learning to use the tools. I would say most of what I know I learnt on my own, and I picked up a lot from other teachers who would share ways they used to teach using technology."

The view expressed above highlights the irregular nature of formal training, which frequently presents basic functionalities of digital tools without considering their practical applications in the classroom. The reliance on peer collaboration to improve understanding indicates a serious deficit in formal professional development programmes. Such experiences emphasise the importance of ongoing training to equip teachers with comprehensive skills to maximise the potential of digital technologies. In support, Darling-Hammond and Hyler (2020) emphasise that professional development is most effective when it is accompanied by the appropriate infrastructure, including resources, mentorship, and collaboration.

A similar issue was raised by Participant Two (P2), who indicated that the onset of the COVID-19 outbreak acted as a catalyst for integrating digital tools in teaching, prompting the Department of Education to provide rapid training on platforms like Microsoft Teams. She commented,

"When the pandemic first hit, we had a couple of sessions run by the district officials on Microsoft Teams and some webinars run by educational technology firms on various digital tools that we could use."

Based on participants' responses, these meetings were often organised in response to a crisis, and they tend to prioritise immediate needs over fostering a deeper understanding of digital pedagogy. Furthermore, the involvement of external technology businesses in providing webinars also suggests a growing recognition of the role of private entities in supporting digital education, although this support may not always align with the specific needs of teachers and learners. The COVID-19 pandemic has highlighted the significance of online training, as evidenced by participant feedback and research findings. Hodges et al. (2020) observed that the transition to online education during the pandemic demonstrated the potential of digital tools.

Participant Three (P3) expressed similar sentiments to other participants, noting that training from both the school and external organisations, such as tech and telecommunications companies, plays a crucial role in supporting professional development. She explained,

"I've been to a few workshops that the school has run, and a couple of webinars from tech companies, but most of what I learnt by educating myself, like watching YouTube videos, reading blogs, and talking to other people in my field."

This remark emphasises the importance of self-directed learning for effective integration of digital technology within the classroom context. Although workshops organised by schools and webinars from tech companies offer some support, they frequently do not fully meet the varied and changing challenges that teachers encounter. The dependence on online materials, like YouTube videos and blogs, demonstrates an initiative for professional growth but also underscores the shortcomings of traditional training programmes in preparing teachers for the digital era. Furthermore, the involvement of these organisations in introducing knowledge and resources raises concerns regarding the curriculum they provide to teachers. Selwyn (2016) warns against reliance on outside entities whose goals may not always align with the complex requirements of both teachers and learners.

On the other hand, Participant Four (P4) felt that the Department of Basic Education (DBE) should take more responsibility for equipping teachers with the necessary skills to integrate technology effectively into teaching and learning. He noted that teachers often relied on external stakeholders for professional development on digital tools. He stated,

"We've had a few trainings here at our school about things such as Google Classroom and digital platforms, and we've also had a few webinars from individual companies such as MTN and Mthinte Communications."

The mention of specific digital platforms like Google Classroom indicates a targeted effort to familiarise teachers with tools that are widely used in education for curriculum delivery. However, the reliance on external companies for training reveals a potential gap in the capacity of schools or districts to provide comprehensive professional development internally. This outsourcing of training responsibilities may result in a lack of contextualization, as external trainers may not fully understand the unique challenges faced by teachers in specific settings. The results on the training and encouragement of digital tools to teach were also consistent with the themes found in the literature. They demonstrate the significant reliance on formal and informal professional development systems and reveal continued institutional incapacity to provide effective training.

Participants' descriptions of workshops and webinars that focus on functionality rather than practical application in the classroom demonstrate an imprecision between trainer and educator. This, therefore, limits the effectiveness of professional development in schools.

Darling-Hammond et al. (2017) confirm this concern, arguing that effective training should combine hands-on learning with theoretical understanding to assist teachers in using digital tools in their teaching context. Disparities in training quality and accessibility further highlight systemic edifice injustices. UNESCO (2020) cautions that teachers working in poorer environments like Harry Gwala District can struggle to find professional learning opportunities. In spite of these issues, the results also reveal how teachers are flexible and adaptable. Many participants reported using informal connections, exploring tools on their own to develop their digital skills. This is consistent with Bandura's (1986) notion of self-efficacy, where the central role is to have people trust that they can succeed by hard work and perseverance. In other words, teachers' proactive strategies to close gaps in training reflect dedication to professional development and the potential for learning through self-teaching.

5.8.3 Professional learning communities (PLCs)

Most participants reported that attending PLCs helps them improve their technology knowledge. They further observed that PLC activities provide opportunities for collaborative learning, sharing best practices, and gaining hands-on experience with new tools and strategies. Some participants commented that professional development sessions, such as circuit cluster meetings and PLCs, provide formal channels for reflective conversations, sharing resources and problem-solving as a group. Free networks such as WhatsApp groups, forums, and crowd-sourcing drives supplement these efforts with continual cooperation and sharing of knowledge. Furthermore, these participants' observations align with the literature on how teacher collaboration has the power to inspire innovation, improvement, and group effectiveness. The researcher believes that schools can support teachers in implementing a technology-based teaching method that will help learners learn and grow. Stoll et al. (2006) argue that PLCs enable teachers to collaborate effectively and share best practice.

Participants Two (P2) commented that PLCs enhance teachers' self-esteem, expanding their knowledge of integrating digital technology into teaching and learning. She further noted that sharing resources, having frequent discussions and creating materials together enable teachers to overcome obstacles and develop innovative strategies that improve student engagement and learning. She elaborated that this is where the online presence becomes an important aspect of collaboration, as it allows teachers to reach out beyond borders and access a wider source of information and knowledge. She explained,

"We have monthly professional development sessions where we share what's working in our classrooms. I also collaborate informally with other teachers through WhatsApp groups and Google Drive. We share lesson plans, tools, and resources, and I find these exchanges incredibly valuable."

This statement highlights the dual role of formal and informal collaboration among teachers in enhancing their professional practices. Monthly professional development sessions provide a structured platform for teachers to share teaching strategies and reflect on tools that have worked effectively in their classrooms. Informal networks, such as WhatsApp groups and Google Drive, play a complementary role by offering an accessible space where teachers can continue discussions, share lesson plans, and exchange resources. The value of these exchanges lies in the ability to draw from colleagues' experiences, which not only saves time but also fosters innovation in lesson design and delivery. This collective sharing of expertise demonstrates how collaboration empowers teachers to improve their teaching practices and adapt to evolving challenges. In addition to PLCs, Participant Three (P3) pointed out that formal school meetings are also attended for professional development purposes, allowing teachers to learn from one another at the school level. This aligns with Trust et al. (2018), who assert that online professional networks play a critical role in expanding opportunities for collaborative learning and knowledge sharing. For example, platforms such as WhatsApp and Google Drive enable teachers to share resources regardless of geographical location and to adopt creative approaches that might not be possible within the school setting. She mentioned,

"Every week, there's a meeting at school where each one of us shares our teaching strategies, challenges we're facing, and anything related to teaching and learning. And I also belong to a group of teachers from different schools. It's an online group, and we share, we talk, we discuss, sometimes we produce some material together."

Based on participants' viewpoints, weekly meetings are seen as important because they provide teachers with a consistent and supportive space to share both successes and challenges. In essence, these meetings serve as a platform for school-based professional development. Regular interactions of this nature promote reflective practice, allowing teachers to collectively analyse what is effective and what remains challenging. Beyond the school environment, online groups further extend this collaboration across different schools,

creating a broader network where teachers share ideas, strategies, and even co-create teaching materials. The production of shared materials, as described by Participant Three (P3), illustrates the practical benefits of collaboration, where collective effort leads to high-quality resources that are beneficial across various classroom contexts. This highlights how subject meetings extend the professional development process, ensuring that teachers remain equipped with diverse digital tools and innovative teaching strategies.

5.8.4 Cluster meetings

Moreover, Participant Four (P4) mentioned that cluster meetings and online group networks allow him to connect with colleagues from other schools to build a broader professional network. He explained,

"I belong to a circuit cluster. We used to have a weekly meeting about what was working and what was not in the classroom. I work with teachers across the district, and together we have an online group where we share materials and chat about new tools. It's very informative, a great network of support."

The mention of circuit cluster meetings demonstrates that professional development is not limited to individual schools but extends across districts. These weekly sessions create opportunities for teachers to engage in meaningful discussions about effective practices and challenges within their classrooms. The online group enhances this collaboration by serving as a platform for continued dialogue, resource sharing, and exploration of new digital tools. This dual approach ensures that teachers receive continuous support, benefiting from the collective experiences of a broader group of colleagues. The ability to share and learn from each other fosters a culture of collective problem-solving, where teachers work together to implement innovative strategies that enhance student outcomes.

Similarly, Participant Six noted that collaboration strategies only work if the school has a culture that supports creativity and professional development. He further acknowledged that Professional Learning Communities (PLCs) meetings create a supportive forum where teachers feel free to share their experiences. Fullan and Quinn (2016) supported this view and assert that school professional development builds collaboration in which teachers feel empowered to explore new tools and teaching methods. He remarked,

"We have regular professional learning community meetings at my school, whereby we share professional practice and teaching experience. I am also a member of online forums, which mostly discuss issues about Business Studies. Teachers post what's working and share resources."

These sentiments demonstrate the importance of professional learning communities (PLCs) in promoting collaboration and continuous professional development. These participants believe that PLCs provide structured opportunities for teachers to share their experiences, reflect on their teaching practices, and collectively address challenges. The mention of subject-specific forums for Business Studies further highlights how digital platforms promote professional development, where teachers focus on subject-specific issues, tools, and strategies. By sharing what works in their classrooms, teachers create a supportive environment where they can learn from each other's successes and adapt innovative methods to their own contexts. This kind of collaboration not only strengthens teaching practices but also enhances student learning experiences by ensuring that teachers are well-prepared to address their learners' needs effectively.

What participants have learnt also shows how important cooperation is in the integration of digital resources and in more effective teaching and learning. Formal forums like professional development meetings, circuit cluster meetings and PLCs are organised for teachers to reflect and exchange best practices. As a result, teachers can discuss difficulties, assess tools, and make resources with other teachers in a setting of connection and common purpose. Informal channels, such as WhatsApp groups, online communities, and shared drives, are important for continuing dialogue and sharing information for professional development purposes. Official collaboration (highlighted in professional development, professional learning communities (PLCs) and circuit cluster meetings) is a structured space for teachers to share strategies, tools and resources. Moreover, participants pointed out how frequent school/district meetings foster the reflective discussion where teachers share success stories, solve problems and compare different digital tools together. To conclude, this type of session helps facilitate continuous improvement, where teachers have the opportunity to learn from each other and come up with solutions to classroom problems, especially regarding technology integration.

5.9 Conclusion

This chapter presented descriptive analysis of data that was generated through semi-structured interviews and lesson observations. The findings of this chapter were analysed and interpreted using a literature review and theoretical framework to make sense of the research findings. Four major themes emerged after data analysis and interpretation. Moreover, the first theme was based on the types of digital tools used by teachers to enhance the teaching of Grade 12 Business Studies. Findings indicated that teachers often demonstrated great resilience and flexibility towards integrating technology for effective teaching and learning. Participants further shared that they use various digital tools and social media platforms to enhance the teaching of Grade 12 Business Studies. These include PowerPoint slides, interactive whiteboard, laptops, a data projector, WhatsApp, Facebook and YouTube. Furthermore, the second theme was based on how teachers integrate digital technology into their instructional design to enhance the teaching of Business Studies Grade 12. Findings showed that digital technology plays a crucial role in simplifying abstract concepts and also in promoting active, collaborative and inclusive learning in Business Studies classrooms.

The third theme was concerned with the affordances of digital technology to enhance innovative pedagogy in business studies. Participants shared that digital technology plays a transformative role in supporting learner-centred, self-directed learning and enhancing assessment practice. The fourth theme was based on the type of professional development opportunities available to Business Studies teachers to enhance their use of innovative pedagogy. Findings indicated that teachers attend workshops, webinars, and trainings offered by schools, districts, and external organisations to help them enhance their competencies in the integration of digital technology to promote an innovative pedagogy approach in Business Studies classes. The next chapter focuses on the contribution of the study to the body of knowledge.

Chapter 6

Contribution of the Study

6.1 Introduction

The preceding chapter analysed and synthesised data that was generated through semi-structured interviews and lesson observation. This chapter presents the contribution of the study, drawing from a multiple case study of six secondary schools in Harry Gwala District. Based on the findings discussed in Chapter 5, this study proposed a model to enhance the teaching of Grade 12 Business Studies, underpinned by Conversational and Engagement Theories in the rural South African school. The figure 6.1 below outlines the unique contribution model for innovative pedagogy in Grade 12 Business Studies.

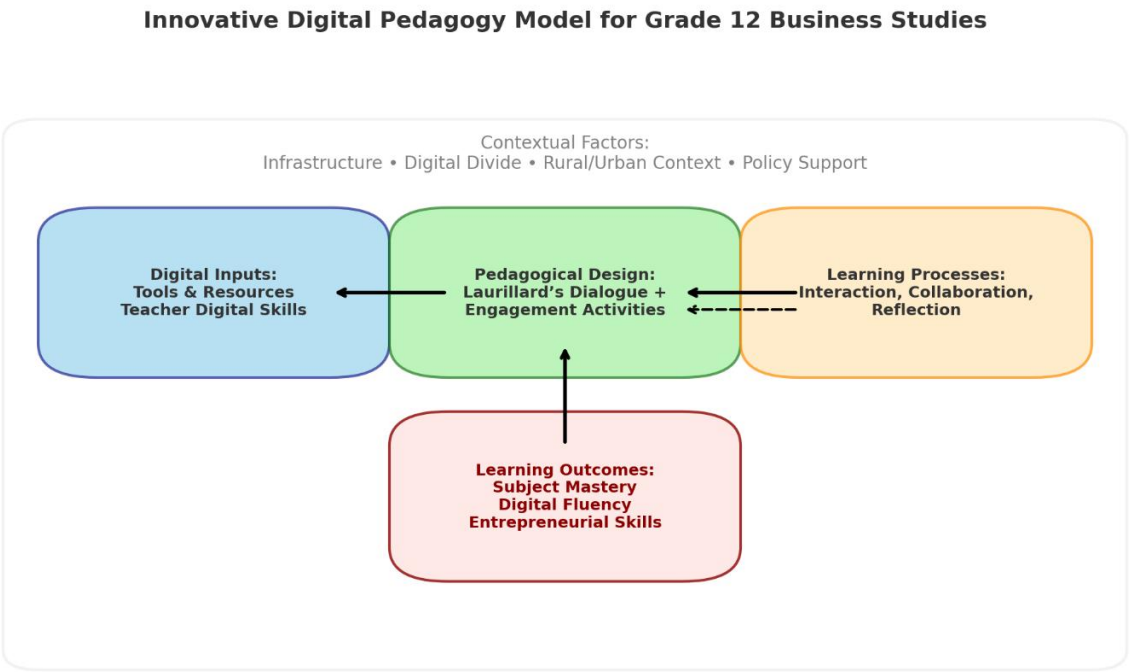


Figure 6.1 Innovative digital pedagogy model for Grade 12 Business Studies

- Blue box (Digital Inputs): Tools, resources, and teacher digital skills.
- Green box (Pedagogical Design): Combines Laurillard's conversational dialogue with engagement activities.

- Orange box (Learning Processes): Learners' interaction, collaboration, and reflection in digital spaces.
- Red box (Learning Outcomes): Subject mastery, digital fluency, entrepreneurial skills.
- Grey outline (Contextual Factors): Infrastructure, digital divide, rural/urban context, policy support affecting all components.

Arrows show how digital inputs feed into pedagogical design, which shapes learning processes and outcomes, with feedback loops (dashed arrow) representing iterative improvement.

This model illustrates how digital inputs, pedagogical design, learning processes, and learning outcomes interact within the context of Grade 12 Business Studies. Drawing on Laurillard's Conversational Framework and Engagement Theory, the model shows that innovative digital pedagogy begins with the availability of digital inputs (tools, resources, and teacher digital skills). These inputs inform the pedagogical design, which blends iterative dialogue and feedback (Laurillard) with authentic, collaborative tasks (Engagement Theory). The resulting learning processes, characterised by interaction, collaboration, and reflection, lead to improved learning outcomes, including subject mastery, digital fluency, and entrepreneurial competencies. Contextual factors such as infrastructure, the digital divide, rural/urban disparities, and policy support influence each stage of the model. Feedback loops between learning processes and pedagogical design emphasise continuous improvement and adaptation. To use this model effectively, this study proposed guidelines for Grade 12 Business Studies teachers to use the model to enhance innovative pedagogy; refer to the figure 6.2 below.

Figure 6.2 Guidelines for an innovative digital pedagogy model (Author's Own source)

The proposed guideline for innovative digital pedagogy in Grade 12 Business Studies draws on Laurillard's Conversational Framework and Engagement Theory, synthesising their principles into seven interrelated guidelines. In addition, each guideline responds to identified gaps in the literature, specifically the predominance of generic ICT integration studies, the neglect of subject-specific pedagogy, and the marginalisation of rural schools in digital education discourse.

6.2 Discussion of principles

6.2.1 Foster Iterative Dialogue (Laurillard's Conversational Framework)

At the heart of Laurillard's framework is the recognition that learning is a conversational process, requiring iterative exchanges between teachers and learners. In a digital pedagogy context, this means creating structured opportunities for dialogue mediated through technology. Tools such as learning management systems (e.g., Moodle, Google Classroom), discussion forums, or even low-bandwidth messaging platforms like WhatsApp can facilitate this exchange. Iterative dialogue ensures that learners do not merely consume content but engage in cycles of questioning, feedback, and refinement of their understanding. This principle addresses the gap in the literature where ICT integration is often reduced to one-way content delivery, rather than enabling deeper pedagogical interaction.

6.2.2 Design Authentic, Real-World Business Tasks (Engagement Theory)

Engagement Theory emphasises purposeful, real-world learning tasks that foster active involvement. In Business Studies, this translates into authentic digital projects such as entrepreneurship simulations, digital marketing campaigns, or stock-market games. Such activities go beyond rote memorisation and instead require learners to apply concepts in meaningful contexts, thereby preparing them for entrepreneurial and economic participation in the Fourth Industrial Revolution. This directly addresses the lack of subject-specific ICT integration identified in the literature by grounding digital pedagogy in tasks that reflect the realities of business practice.

6.2.3 Promote Equitable Access and Inclusivity

Persistent challenges of the digital divide, particularly in rural South African schools, undermine the potential of digital pedagogy (Makumane & Mpungose, 2022). This framework responds by advocating for low-bandwidth, mobile-friendly platforms and blended approaches that combine offline and online strategies. By doing so, it ensures inclusivity and avoids deepening inequalities in access to digital resources. This principle acknowledges that without deliberate attention to context, innovative pedagogy risks excluding the very learners it seeks to empower.

6.2.4 Enhance Teacher Professional Development

Existing professional development programmes in South Africa have often been generic and tool-focused, neglecting subject-specific pedagogical applications (Ndlovu & Moyo, 2023; Rasool & Botha, 2023). This framework insists on Business Studies-focused professional learning, emphasising the pedagogical use of digital tools rather than mere technical competence. Furthermore, it advocates for professional learning communities where teachers collaboratively share digital practices and reflect on their teaching experiences. This aligns with Laurillard's emphasis on dialogue, extending the principle of iterative exchange to teachers themselves as lifelong learners.

6.2.5 Strengthen Engagement Through Collaboration and Purposeful Learning (Engagement Theory)

Engagement Theory's Relate-Create-Donate model is particularly powerful in Business Studies education:

Relate: learners collaborate in digital teams, reflecting the teamwork inherent in business environments.

Create: learners design outputs such as business plans, marketing infographics, or entrepreneurial pitches using digital tools.

Donate: learners share their outputs with authentic audiences, entrepreneurs, community organisations, or peers, bringing purpose and accountability to the learning process.

By embedding this cycle, the framework ensures that digital pedagogy is not a superficial add-on but a means of fostering deep learner engagement that extends beyond the classroom.

6.2.6 Integrate Subject-Specific Digital Tools

To move beyond the generic ICT integration noted in the literature, the framework calls for the deliberate selection of digital tools tailored to Business Studies. These include financial literacy applications, stock-market simulators, digital business plan templates, and data analysis tools like Excel or Google Sheets. Such tools not only make abstract concepts concrete but also equip learners with practical, transferable skills. This subject-specific focus is what distinguishes the study from existing ICT integration research and strengthens its contribution to knowledge.

6.2.7 Continuously Evaluate and Adapt

Finally, consistent with Laurillard's framework, the model emphasises continuous evaluation through feedback loops. Teachers are encouraged to monitor learner engagement, reflect on the effectiveness of digital tasks, and adapt their strategies accordingly. Digital tools enable this iterative reflection through real-time analytics, learner surveys, or digital learning journals. This ensures that pedagogy remains dynamic and responsive, rather than static and prescriptive.

Contribution to Knowledge

This study makes a dual contribution to the field of digital pedagogy in secondary education. Firstly, it develops the Innovative Digital Pedagogy Model for Grade 12 Business Studies, a conceptual framework that synthesises Laurillard's Conversational Framework with the principles of Engagement Theory to explain how digital inputs, pedagogical design, learning processes and outcomes interact within the South African schooling context. This model extends existing literature on ICT integration by moving beyond generic analyses to a subject-specific, theory-driven articulation of innovative digital pedagogy.

Secondly, the study translates this conceptual model into a set of evidence-based guidelines for implementing digital-enhanced pedagogies in Business Studies classrooms. These guidelines provide actionable strategies for teachers, curriculum planners and policymakers to address contextual barriers such as the digital divide, to strengthen teacher professional development, and to design interactive, authentic learning experiences that improve subject mastery, digital fluency and entrepreneurial skills among learners.

Taken together, the model and guidelines advance both theory and practice: they offer a new lens through which to study and test innovative digital pedagogy while also equipping practitioners with concrete tools for improving teaching and learning outcomes in under-resourced, diverse educational settings.

6.3 Conclusion

This chapter presented and discussed the scholarly contribution of the study to the body of knowledge on ICT-enhanced pedagogy in teaching Grade 12 Business Studies. Moreover, the chapter provides guidelines to respond to identified gaps in the literature, specifically the predominance of generic ICT integration studies, the neglect of subject-specific pedagogy, and the marginalisation of rural schools in digital education discourse. To close such gaps, the chapter proposed a model that can be used to integrate innovative pedagogy in teaching Grade 12 business studies. The following chapter presents summary, recommendations and conclusion of the study.

Chapter 7

Summary, Recommendations and Conclusion

7.1 Introduction

This study aimed to examine the diverse pedagogical approaches employed by teachers in integrating digital technologies into Business Studies lessons and the variations in these approaches across different rural school settings in Harry Gwala District. To address the objective of this research, this study was guided by the following sub-research questions.

1. What digital tools do teachers utilise to enhance the teaching of Business Studies Grade 12?
2. How do teachers integrate digital technology into their instructional design to enhance the teaching of Business Studies Grade 12?
3. What are teachers' experiences with the affordances of digital technology that enhance innovative pedagogy in Business Studies?
4. What professional development opportunities are available to Business Studies teachers to enhance their use of innovative pedagogy?

The preceding chapter presented key findings that emerged from the data analysis and interpretation chapter. This chapter begins by presenting an overview of the study, highlighting the interconnectivity between chapters and summarising key findings to provide an interpretive synthesis. The chapter further provides limitations of the study. Next, the chapter outlines recommendations for further research in the broader area of ICT-integrated pedagogy in resource-constrained contexts. Lastly, the chapter concludes by presenting a conclusion in relation to the study's key findings.

7.2 Overview of chapters

Chapter 1: This chapter provided the orientation of the study. This chapter provided the introduction, background, and rationale for the study. The problem statement, research objectives and research questions of the study were presented in this chapter. The chapter also provided an overview of the structure for the dissertation and explained key operational terms for this research study.

Chapter 2: This chapter presented a detailed literature review related to the study that is being investigated. The literature review explored key concepts that inform the integration of technology in teaching Grade 12 Business Studies. Local and international literature was presented in this chapter to shed more light on how teachers integrate technology for effective teaching and learning.

Chapter 3: This chapter outlined the theoretical framework that underpinned this research study. It further discussed Conversational theory and Engagement theory, which served as a theoretical lens for this research study.

Chapter 4: This chapter outlined the research methodology that was adopted in this study. This chapter presented a detailed discussion on research paradigm, sampling, data collection instruments, research ethics, trustworthiness, data analysis and limitations for the study.

Chapter 5: This chapter described the biographic information of research participants. Thereafter, the research context for this study was discussed in more detail. This chapter further presented key themes that emerged after analysing data that was generated through semi-structured interviews and lesson observations.

Chapter 6: This chapter presented a scholarly contribution of the study to the body of knowledge guided by Conversational and Engagement Theories.

Chapter 7: This chapter presented the overview of the study. A summary of key findings and study limitations was further described in this chapter. The chapter also outlined recommendations for further research as well as the conclusion of the study.

7.3 Discussion of Key Findings

This section presents a summary of key research findings from the themes analysed and discussed in Chapter 5. The following section discusses a summary of the four sub-research questions that guide the study

7.3.1 Sub-research question 1: What digital tools do teachers utilise to enhance the teaching of Business Studies Grade 12?

The study found that teachers use various digital tools in teaching Business Studies to create new pathways to equity in the teaching and learning process. Correspondingly, the study findings revealed that teachers often demonstrated great resilience and flexibility towards integrating technology for effective teaching and learning. Data generated through semi-structured interviews and lesson observations showed that many teachers used a combination of their own, offline digital resources, and shared resources from school, to answer the call in bridging the digital divide.

Moreover, the study findings demonstrated that digital tools significantly influence the teaching and learning of Business Studies in secondary schools, especially in simplifying content delivery, enhancing engagement, and fostering collaboration among learners. Teachers consistently highlighted the use of PowerPoint presentations as a key strategy for delivering interactive lessons. They further explained that PowerPoint allows them to present abstract concepts in a more structured and visually engaging manner through the use of multimedia elements such as images, graphs, and videos. This not only captured learners' attention but also facilitated a deeper understanding of complex Business Studies topics. However, this study also found that challenges such as load-shedding, technical failures, and the risk of over-reliance on digital tools were the major barriers. This suggests the need for teachers to adopt a balanced teaching approach that integrates both modern and traditional teaching methods.

It emerged from this study that social media platforms, such as WhatsApp and Facebook, were widely reported to be used by teachers to extend teaching and learning beyond the classroom. As a result, it appeared that teachers used WhatsApp groups to share resources such as past papers, assignments, and notes while also encouraging dialogue and collaboration among learners. Correspondingly, this study revealed that Facebook was used to promote brainstorming, collaborative discussions, and the sharing of ideas in an interactive environment. This is why teachers observed that these platforms created a sense of community and engagement, encouraging learners to contribute meaningfully to academic discussions. However, the dual nature of social media was acknowledged, with teachers noting the potential for distraction, procrastination, and inequities in access for learners from underprivileged contexts. Therefore, this study advocates that social media is seen as a valuable pedagogical tool when applied purposefully to support teaching and learning.

Moreover, YouTube emerged as another powerful tool for demonstration and contextual learning. Findings indicated that teachers integrated YouTube videos to illustrate difficult concepts such as forms of ownership, strategies, and corporate social responsibility. These resources enabled learners to connect theoretical ideas to real-world practices and global business examples, thereby making learning more relevant and engaging. Nevertheless, concerns about digital literacy, access restrictions, and content reliability were acknowledged as barriers to the effective application of YouTube in teaching and learning.

In addition to these tools, data generated from teachers indicated that interactive whiteboards, laptops, tablets, and projectors were employed to enhance visual presentations, streamline resource sharing, and promote collaboration. Teachers further explained that interactive whiteboards allowed them to combine images, videos, and group activities in ways that encouraged hands-on participation and engagement with content. Laptops and projectors were identified as essential for lesson planning, resource management, and assessment preparation. From the researcher's point of view, these findings suggest that technology not only assists in delivering content but also plays a critical role in promoting inclusivity and equal participation. However, the effectiveness of these tools was often constrained by technical challenges such as power failures and limited access in under-resourced schools. Additionally, the findings from the study suggest that digital technology should not be seen as a replacement for traditional pedagogy but rather as a complementary resource that can significantly enrich the teaching and learning experience.

7.3.2 Sub-research question 2: How do teachers integrate digital technology into their instructional design to enhance the teaching of Business Studies Grade 12?

The findings revealed that digital technology plays a crucial role in simplifying abstract concepts in Business Studies classrooms. Teachers explained that digital tools such as PowerPoint, YouTube, smart boards, and projectors enable them to present lessons in a more structured and visually stimulating way compared to traditional chalkboards. For instance, teachers used slides to summarise key concepts and videos to provide animated demonstrations or real-world case studies. This approach helped learners to engage more actively, ask meaningful questions, and relate theoretical ideas to familiar business examples. Even learners who were often shy became more confident in contributing to discussions.

Moreover, some teachers cautioned that challenges such as power failures and technical issues should be considered when relying on digital tools.

Another important finding that emerged during semi-structured interviews and lesson observation was the role of digital technology in promoting active and collaborative learning. Teachers described how they used pre-recorded lessons, short videos, group activities, and educational simulation games to encourage teamwork and dialogue. These strategies gave learners the chance to brainstorm, problem-solve, and experiment with different scenarios while learning from their peers. The data generated from teachers also highlighted how digital technology supports the creation of inclusive learning environments. In support, teachers explained that digital tools, especially PowerPoint presentations, diagrams, and graphs, allow them to design lessons that meet the diverse needs of learners. Therefore, by presenting content in different formats, teachers accommodated various learning styles and ensured that all learners could engage meaningfully with the subject content. This, therefore, suggests that digital tools were valued for their ability to ensure that no learner was left behind in Business Studies classes.

The study findings further demonstrated that technology expanded access to resources and enhanced communication. As a result, teachers reported using interactive whiteboards, smart boards, and internet platforms to integrate case studies, videos, and past examination papers into their lessons. This not only helped learners to deepen their understanding but also prepared them for formal assessments. More importantly, teachers also recorded lessons so that absent learners could keep up with the curriculum, thereby reducing learning gaps. Additionally, social media platforms, particularly WhatsApp, were widely used to extend learning beyond the classroom. Through WhatsApp groups, teachers shared activities, communicated important information, and encouraged learners to collaborate and exchange ideas. However, critics have noted that social media can distract learners. Despite these benefits, challenges such as technical difficulties, limited resources in disadvantaged schools and the need for teacher training remain as critical issues. Therefore, this study suggests that addressing these barriers through continuous professional development could be essential to ensure that teachers can integrate technology effectively to improve teaching and learning outcomes.

7.3.3 Sub-research question 3: How do teachers integrate digital technology into their instructional design to enhance the teaching of Business Studies Grade 12?

It transpired from the study that digital technology plays a transformative role in supporting learner-centred learning in Business Studies classrooms. Teachers reported that digital tools enable them to shift from traditional teacher-centred approaches to more learner-centred pedagogies, whereby learners actively participate, collaborate, and reflect on their learning. However, challenges identified included unequal participation of learners in large classes and the need to ensure equitable access to technology.

Findings further revealed that digital technology was used to support self-directed learning and peer feedback. Teachers reported that digital tools such as Google Forms and WhatsApp were used to provide immediate feedback, foster learner autonomy, and encourage collaborative dialogue. Moreover, some teachers highlighted that digital tools enable them to save time. For instance, platforms such as ChatGPT, Microsoft Teams, and online lesson plans allow teachers to prepare lessons efficiently, deliver content effectively, and communicate with learners outside class hours. However, barriers such as limited internet access, electricity, and digital infrastructure in some schools hinder the integration of technology to support teaching and learning of Grade 12 Business Studies. Finally, findings showed that digital technology enhances assessment practices. For instance, teachers were reported using Google Forms, interactive whiteboards, PowerPoint, YouTube, and WhatsApp to design formative and summative assessments aligned with diverse learning needs. The findings suggest that digital technology supports student-centred learning, self-directed learning, efficient lesson delivery, and diverse assessment strategies in Business Studies classrooms. Successful integration, however, depends on equitable access, teacher training and sufficient digital infrastructure.

7.3.4 Sub-research question 4: What professional development opportunities are available to Business Studies teachers to enhance their use of innovative pedagogy?

The study revealed that the integration of digital technology in classrooms is heavily dependent on professional development and ongoing support for teachers. This was evidenced when teachers indicated that workshops, webinars, and trainings offered by schools, districts, and external organisations help to enhance their competencies in the

integration of digital technology to promote an innovative pedagogy approach in Business Studies classes. However, teachers noted that these sessions often focus on technical functionalities rather than practical classroom integration, limiting their effectiveness. Many teachers, including P1 and P3, reported relying on self-directed learning through YouTube tutorials, blogs, and peer collaboration to supplement formal training. This, therefore, highlights both the initiative of teachers and the inadequacy of structured professional development programmes.

The findings further revealed that the Department of Basic Education (DBE) provided some support through workshops and training initiatives during the COVID-19 pandemic. The study revealed that Professional Learning Communities (PLCs) and cluster meetings served as vital platforms for collaborative professional growth. Teachers mentioned that PLCs allow them to share resources, co-create materials, reflect on teaching practices, and learn from each other's experiences. Again, the study findings demonstrated that informal networks, such as WhatsApp groups, extend this collaboration beyond school boundaries, offering accessible spaces for continuous dialogue and knowledge exchange. For instance, P2 supported that these platforms enhance teachers' self-esteem, foster innovative strategies, and support student engagement. This study found that circuit cluster meetings similarly provide opportunities for teachers to share best practices, discuss challenges, and explore new digital tools that could support the enhancement of learners' knowledge. This study maintained that professional development for digital technology integration is most effective when it combines formal training, peer collaboration, and self-directed learning. Therefore, formal professional development initiatives such as PLCs, workshops, and cluster meetings could be complemented by informal online networks to enable teachers to reflect, innovate, and improve their teaching practices. The study underscores the need for continuous, context-based professional development and practical training to empower teachers in effectively using digital technology to enhance teaching and learning of Grade 12 Business Studies.

7.3.5 Research Main Question

What innovative pedagogies do teachers utilise to enhance the teaching and learning of Grade 12 Business Studies?

The study revealed that teachers employ a range of innovative pedagogical approaches underpinned by digital technology to enhance the teaching and learning of Grade 12 Business Studies. These approaches reflect a shift from traditional teacher-centred instruction towards learner-centred, collaborative, and technology-enabled practices designed to improve engagement, inclusivity, and learning outcomes.

1. Technology-Enhanced Content Delivery and Concept Simplification

Teachers reported using a variety of digital tools, including PowerPoint, YouTube, interactive whiteboards, smart boards, laptops, tablets, and projectors, to make abstract Business Studies concepts more concrete and accessible. PowerPoint presentations allowed for the integration of images, graphs, and videos, creating multimedia-rich lessons that captured learner interest and supported deeper conceptual understanding. YouTube was used to contextualise topics such as forms of ownership, strategies, and corporate social responsibility with real-world examples. These tools helped bridge theory and practice, enabling learners to relate content to familiar business scenarios and global practices.

2. Learner-Centred and Collaborative Pedagogies

Digital technology enabled teachers to adopt learner-centred pedagogies that encouraged active participation, collaboration, and reflection. Teachers described using pre-recorded lessons, educational simulations, group activities, and case studies to promote problem-solving and teamwork. Social media platforms, particularly WhatsApp and Facebook, extended learning beyond the classroom, allowing learners to share resources, discuss topics, and co-create knowledge in an interactive environment. This shift from one-way instruction to two-way engagement was reported to boost learner confidence, even among shy students.

3. Support for Self-Directed Learning and Differentiation

Teachers integrated digital tools such as Google Forms, WhatsApp, Microsoft Teams, and online lesson repositories to support self-directed learning, immediate feedback, and personalised instruction. Lessons were designed in multiple formats (slides, videos, diagrams, graphs) to accommodate diverse learning styles and ensure that no learner was left behind. By recording lessons and sharing materials online, teachers also provided continuity for absent learners, reducing learning gaps and fostering greater learner autonomy.

4. Innovative Assessment Practices

Digital technology was used not only for delivery but also for assessment and feedback. Teachers designed both formative and summative assessments using Google Forms, interactive whiteboards, PowerPoint, YouTube, and WhatsApp. These tools allowed teachers to align assessments with diverse learner needs, monitor progress more effectively, and provide timely, constructive feedback. This integration supported a continuous learning and improvement cycle, consistent with engagement-driven and conversational learning frameworks.

5. Professional Collaboration and Continuous Improvement

The study highlighted that teachers' ability to implement innovative pedagogies was closely linked to professional development and peer support. Formal initiatives such as workshops, webinars, Department of Basic Education training, cluster meetings, and Professional Learning Communities (PLCs) provided foundational skills. However, many teachers supplemented these with informal networks (such as WhatsApp groups, YouTube tutorials, and blogs) to exchange best practices, co-create resources, and reflect on their teaching. These collaborative spaces strengthened teacher self-efficacy and fostered a culture of continuous improvement in the integration of digital technology.

6. Challenges and the Need for Context-Sensitive Approaches

Despite these innovations, teachers identified persistent barriers including power outages, limited internet connectivity, inadequate digital infrastructure, unequal learner access, and the risk of over-reliance on technology. These challenges were particularly acute in under-resourced schools, underscoring the need for context-sensitive strategies such as low-data or offline resources, blended teaching approaches, and ongoing capacity building to ensure equity in access and participation.

Integrated Perspective

Taken together, the findings suggest that innovative pedagogy in Grade 12 Business Studies is not defined by a single tool or strategy but by a blended, adaptive approach that integrates digital technology with collaborative, learner-centred teaching practices. Teachers in the study demonstrated resilience, creativity, and initiative in leveraging available resources to

simplify complex content, promote active learning, support self-directed study, and diversify assessment. At the same time, they relied on formal and informal professional learning networks to sustain their practice and develop new strategies.

From the researcher's perspective, these findings point to the potential of digitally enhanced, context-sensitive pedagogies to improve both engagement and equity in Business Studies classrooms. However, their effectiveness depends on adequate infrastructure, ongoing professional development, and policies that support equitable access. In this way, innovative pedagogy becomes not just the use of technology, but the purposeful design of inclusive, interactive, and reflective learning experiences aligned with the curriculum and the realities of South African secondary schools.

7.4 Practical Recommendations

This section outlines practical recommendations based on the findings of the study. This includes highlighting actions to be taken by different stakeholders in the education sector, such as (1) teachers, school leaders, curriculum subject advisors and policy makers at the Department of Basic Education (DBE).

7.4.1 Teachers: Capacity building and Support on ICT integration

The findings showed that many of the teachers in rural Business Studies classrooms were not formally trained in the use of technology. However, the majority of them showed high degrees of adaptability and resilience. Although the issues surrounding rurality will not magically go away, this study addresses this skills deficit by recommending that the DBE and teacher development directorate empower teachers through continuous professional development to enhance their digital competencies and pedagogical practices. Furthermore, teachers should be encouraged to adopt innovative and learner-centred teaching strategies, such as self-directed learning, flipped classrooms, and the use of multimedia tools, to simplify abstract concepts and increase learner engagement. Finally, this study further recommends that teacher training should address a number of skills and support. For instance, how to integrate ICT in the classroom.

7.4.2 School principals: Making ICT a priority in infrastructure and peer-support networks

This study finds that school principals play a crucial role in creating an environment that supports ICT integration. Therefore, this study recommends that school principals should prioritise the provision of ICT infrastructure, ensure reliable access to digital tools, and support staff with technical and pedagogical resources. Moreover, this study recommends that school principals should encourage team teaching and a culture of collaboration where teachers share best practices and innovative approaches. Apart from the above, principals should acknowledge and reward innovation associated with digital teaching as part of the performance appraisal component to encourage innovative pedagogy in teaching Business Studies.

7.4.3 Curriculum developers: Flexible Digital Content Underpinning the CAPS Document

This study recommends that Curriculum designers and those accredited at the DBE's Curriculum Management Directorate must recognise that whilst the CAPS document is quite rigorous, it provides limited guidance on how to practically integrate ICT in teaching subjects like Business Studies. This lack of guidance leads to uncertainty for rural teachers, specifically in contemplating how their digital devices and tools will enhance the achievement of diverse curriculum outcomes. Accordingly, this study recommends that curriculum designers should develop additional complementary guides that provide clear examples of how technology can support specific content and associated assessment tasks from Business Studies. For example, teachers could be provided with an idea of how to use PowerPoint slides, short video clips of examples or case studies to illustrate Business Studies content.

7.4.4 Policymakers (DBE)

This study recommends that DBE must assist the system to shape national ICT in education policies that are adaptable and flexible to local contexts, particularly for rural schools. The e-Education White Paper and follow-up frameworks have been an admirable starting point, but national or provincial implementation has not addressed important deep rural issues, such as poor network coverage, unreliable electricity, and low ICT literacy levels of teachers. This study also recommends that teacher ICT training take place in a more decentralised and flexible way. This suggests that training should allow for shorter learning engagements, and iterative learning. Furthermore, this study recommends that DBE must take an active role in

working with provincial departments to identify provincial, satellite training centres as well as mobile training teams to support rural teacher ICT training, rather than rely on centralised workshops. Furthermore, it is recommended that DBE must also create rural ICT roll-out funding within conditional grants (with accountability) that require evidence that will demonstrate a positive impact through either improved learner performance or more innovation in teaching and learning. Finally, this study recommends that DBE must consider an intergovernmental collaboration with the Department of Communications, local municipalities and the private sector to develop rural digital infrastructure.

7.5 Policy Implications

This section integrates the empirical research and theoretical evidence of the study into actionable recommendations for the Department of Basic Education (DBE), provincial education departments, and district education authorities. It recommends a differentiated equity-based policy response to ICT in education that reflects the digital divide in rural South African schools. It outlines three primary weighted policy imperatives: targeted ICT investment, differentiated professional development, and empirically-researched district-based ICT support structures.

7.5.1 Targeted ICT Investments in Rural Schools

One of the clear underpinnings of the study is the urgent need for targeted ICT investment for rural schools. The current policy approach to ICT transmission is one-size-fits-all. However, one of the conclusions of this study is that the data reflect a substantial disjuncture between rural and urban access to infrastructure and funding. Many of the funding opportunities available through existing government policies neglect rural-specific infrastructural and economic contexts, which impacts effective transmittance and digital exclusion. Therefore, this study recommends that policymakers must stop with the one-size-fits-all policies and instead direct resources to under-resourced rural-based schools based on a needs-based geographical model. The findings from the study further highlighted the challenges of limited resources to support integrating ICT into teaching and learning in classroom lessons. These findings include electricity problems, internet connectivity, and availability of reliable policy resources. It is also recommended that DBE must work with the Department of Communications and Digital Technologies, municipalities and private telecommunications

organisations to ensure that all schools have the opportunity to integrate technology for effective teaching and learning.

7.5.2 Diversity in Professional Development Based on Digital Readiness

An additional key policy implication of this study is the need for diversity in professional development when enabling teacher access to ICT based on their varying levels of confidence, digital literacy, and access barriers. Therefore, this study recommends that funding and policy for professional development opportunities should also be provided in teacher career progression policies, identifying teachers with demonstrated ICT competencies and credits for teachers presenting mentoring opportunities for other teachers.

7.5.3 Empirically demonstrate a district-level ICT support system

To conclude, the findings also demonstrate the necessity for empirical research-informed district-based ICT support systems that are also situated in the realities of teachers working in rural areas. This study recommends that each district should conduct quarterly needs assessments based on classroom observations, interviews with teachers, and learner performance data, so that support strategies are evidence-based and responsive. It is recommended that District ICT support systems also include support systems, meaning help desks for technical support, and mobile teams that can offer support on digital devices. This level of support may build teacher confidence and increase digital continuity in curriculum delivery.

7.6 Limitations of the Study

This study aimed to provide insight into diverse pedagogical approaches employed by teachers in integrating digital technologies into Business Studies lessons and the variations in these approaches across different rural school settings in Harry Gwala District. However, there were several limitations identified in this research. The sample size of this study comprised a small number of Business Studies participants from Harry Gwala District, in KwaZulu-Natal; therefore, the sample size may not represent the perspectives of all secondary school teachers in the province. This suggests that the findings of the study cannot be generalised in all schools across KwaZulu-Natal.

Another limitation of this research was studying Business Studies teachers alone, while the study suggested filling a significant gap in the literature. Therefore, this reduced cross-subject generalisation. In terms of ICT integration into practice, the affordances and constraints could be different from Mathematics, Science, or Languages because of differences in pedagogical content knowledge and ICT associated with these subjects. Next, the absence of triangulated data, such as learner performance indicators and results, or classroom artefacts and records of real-time use of technology, may have strengthened the empirical validity of the findings.

Furthermore, the study faced certain limitations that should be acknowledged. The data collection was generated over a specific period of time, which means that the findings are situated within that time frame. Since technology changes from time to time, some of the insights presented in this study may lose relevance as new digital tools, platforms, and pedagogical trends emerge. In addition, the research was undertaken in a period marked by significant post-COVID-19 educational adaptations. This context may have influenced both teacher attitudes and institutional priorities regarding ICT integration, as many schools were still transitioning from emergency remote teaching to more structured digital pedagogy. Consequently, the findings should be interpreted with an understanding of these contextual factors, which may not fully represent long-term or stable patterns of ICT use in education.

7.7 Recommendations for Future Research

Based on the findings and limitations of the study, it is possible to suggest a number of research directions to extend and enhance the grasp of ICT integration in rural education. Firstly, more quantitative or mixed methods approaches are needed to directly explore the impact of ICT on teaching and learning.

Secondly, based on the qualitative approach used in this study, future research could use standardised instruments to survey teachers to access large differences and similarities across provinces and districts, thereby improving generalisation.

Thirdly, future research needs to compare responsive ICT integration across provinces and across subject areas, which would be valuable since institutional policies, infrastructure, educational contexts and cultures will ultimately shape the success and nature of ICT integration. A comparison of Business Studies with other subject areas like Life Sciences and

Mathematics, for example, would enable analyses of each subject's pedagogical adaptations and uniqueness challenges.

Fourthly, it would be enriching to foster action research to be undertaken by teachers themselves to contribute to the broader field with teacher research features of innovation, resilience, and accountability to policy as they relate to modes of ICT usage.

Finally, future research endeavours should seek to diversify methodologies, widen the subject and geographic range of studies, and deepen temporal analyses to better construct a coherent and dynamic body of knowledge for future action on this topic.

7.8 Conclusion

This study examined the diverse pedagogical approaches employed by teachers in integrating digital technologies into Grade 12 Business Studies lessons, with particular attention to variations across rural school settings in Harry Gwala District. This chapter provided an overview of the entire thesis by revisiting the research questions, summarising each chapter, and synthesising the key findings that emerged from the data analysis and interpretation. It also highlighted the implications of the study, its contributions to the existing body of knowledge, and the practical recommendations arising from the research, as well as suggesting avenues for future investigation. The findings revealed that digital technology has significantly influenced the teaching and learning of Business Studies in secondary schools. Teachers used digital tools to simplify content delivery, enhance learner engagement, and foster collaboration, creating learning environments that were more active, inclusive, and learner-centred. The study also showed that technology expanded access to resources and improved communication both within and beyond the classroom.

Furthermore, the research found that teachers' ability to integrate digital technology effectively was shaped by the professional development opportunities available to them. Workshops, webinars, and training provided by schools, districts, and external organisations were identified as key enablers for building teacher competence in innovative pedagogy. However, many teachers also relied on self-directed learning and informal networks to supplement formal training, underscoring the need for more contextually relevant and practically focused professional development programmes.In conclusion, this study contributes to a deeper understanding of how teachers in rural South African schools are

navigating the opportunities and challenges of digital integration in Business Studies classrooms. By documenting both the successes and the constraints, it offers insights into how digital technology can be harnessed to support equitable, collaborative, and sustainable pedagogical practices and provides a foundation for future research and policy aimed at strengthening digital pedagogy in under-resourced contexts.

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Appendices

Appendix A Ethical Clearance

UNISA university of south africa

UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2024/04/10

Ref: **2024/04/10/48843490/43/AM**
Name: Mr SA Magoso
Student No.:48843490

Dear Mr SA Magoso

Decision: Ethics Approval from 2024/04/10 to 2029/04/10

Researcher(s): Name: Mr SA Magoso
E-mail address: 48843490@mylife.unisa.ac.za
Telephone: 0787190458

Supervisor(s): Name: Dr. K. Mbatha
E-mail address: Mbathk1@unisa.ac.za
Telephone: 0124298812

Title of research:

Innovative Digital Pedagogy: A Case Study of Digital-Enhanced Business Studies in Grade 12

Qualification: PhD Curriculum Studies

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2024/04/10 to 2029/04/10.

*The **medium risk** application was reviewed by the Ethics Review Committee on 2024/04/10 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions that:

1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.
2. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

3. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.
4. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
5. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
6. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
7. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
8. No field work activities may continue after the expiry date **2029/04/10**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number **2024/04/10/48843490/43/AM** *should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,

Prof AT Motlhabane
CHAIRPERSON: CEDU RERC
motlhat@unisa.ac.za

Prof Mpine Makoe
EXECUTIVE DEAN
qakisme@unisa.ac.za

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

Appendix B Permission Letter

KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

OFFICE OF THE HEAD OF DEPARTMENT

Private Bag X 9137, PIETERMARITZBURG, 3200
Anton Lembede Building, 247 Burger Street, Pietermaritzburg, 3201
Email: buyi.ntuli@kzndoe.gov.za Tel: 033 392 1051

Ref No.: 2/4/8/227

Enquiries: Mrs B. T. Ntuli

Mr Siyabonga Andrias Magoso
P.O. Box 72
DONNYBROOK
3237

Dear Mr Magoso

PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

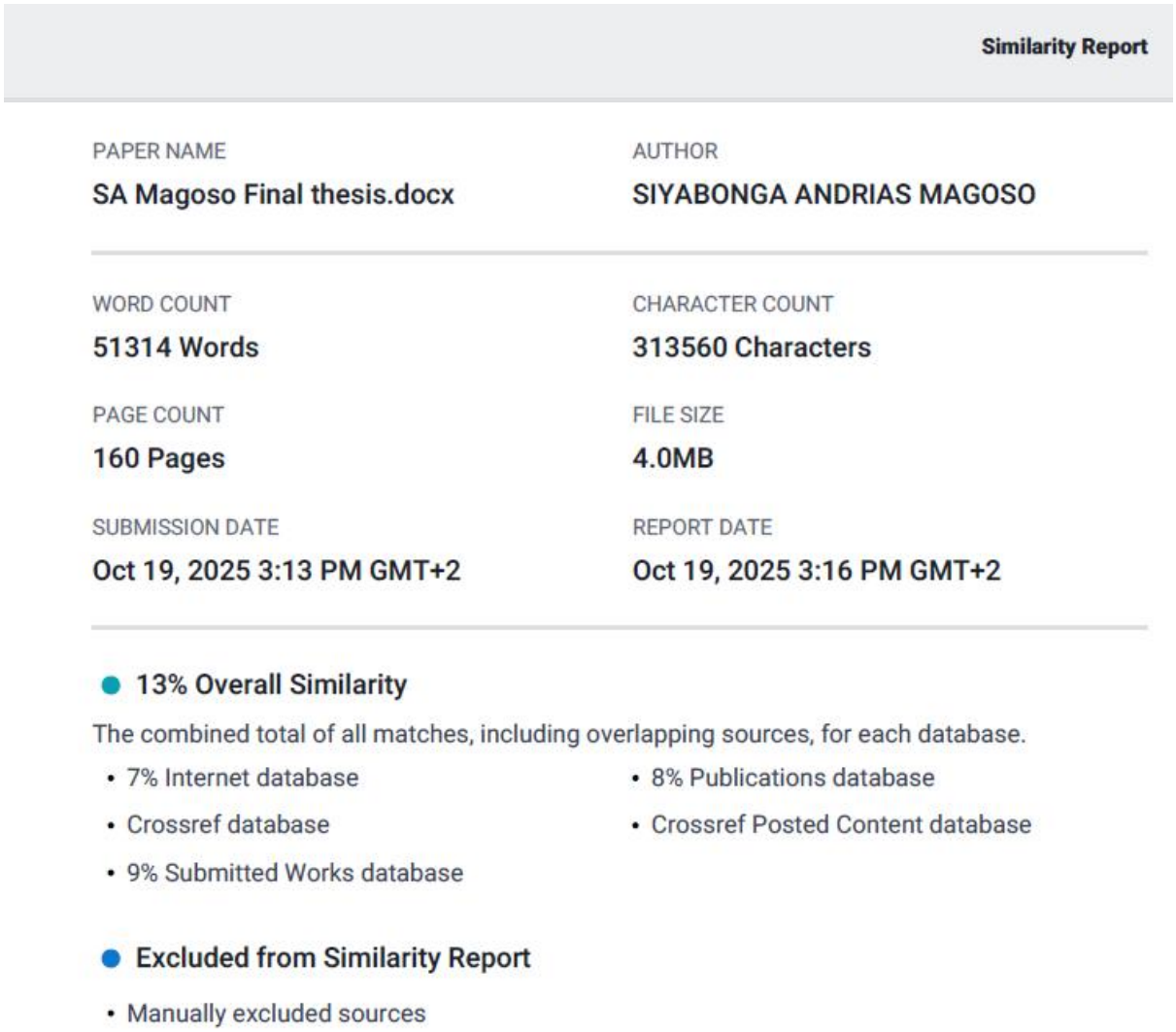
Your application to conduct research entitled: **"ENHANCING COLLABORATIVE LEARNING AND ENGAGEMENT THROUGH INNOVATIVE DIGITAL PEDAGOGY: A CASE STUDY OF DIGITAL-ENHANCED BUSINESS STUDIES IN GRADE 12:"**, in the KwaZulu-Natal Department of Education institutions has been approved. The conditions of the approval are as follows:

1. The researcher will make all the arrangements concerning the research and interviews.
2. The researcher must ensure that Educator and learning programmes are not interrupted.
3. Interviews are not conducted during the time of writing examinations in schools.
4. Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
5. A copy of this letter is submitted to District Managers, Principals and Heads of Institutions where the Intended research and interviews are to be conducted.
6. The period of investigation is limited to the period from **25th July 2024 to 31st December 2027.**
7. Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
8. Should you wish to extend the period of your survey at the school(s), please contact Mrs Buyi Ntuli at the contact numbers above.
9. Upon completion of the research, a brief summary of the findings, recommendations or a full report/dissertation/thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.
10. Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.

Mr G.N. Ngcobo
Head of Department: Education
Date: 25/07/2024

GROWING KWAZULU-NATAL TOGETHER

Appendix C Similarity report



Similarity Report

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Summary

Appendix D Language editing certificate

Independent Editor

kufazano@gmail.com
+27631434276

SATI
SOUTH AFRICAN TRANSLATORS' INSTITUTE

CERTIFICATE OF EDITING

This confirms that I edited substantively the document below, including a Reference list. The document was returned to the author with various tracked changes to correct errors and clarify meaning.

TITLE: **Innovative digital pedagogy: A case study of digital-enhanced business studies in Grade 12**

AUTHOR : **Siyabonga Andrias Magoso**

STUDENT NUMBER : **48843490**

Note: The edited work described here may not be identical to that submitted. The authors, at their sole discretion, have the prerogative to accept, delete, or change amendments made by the editor before submission.

DATE: **16 October 2025**

EDITOR'S COMMENT

The author was advised to effect suggested corrections regarding subject-verb agreement, punctuation and overall academic writing style, to name a few.

Zano

Signature

Dr Kufakunesu Zano, PhD in English. A member of the South African Translators' Institute, Ref 1000686, South Africa 2025