EXPLORING GENERATION ALPHA MULTIPLE INTELLIGENCES FOR IMPROVED CLASSROOM LEARNING IN THE UMLAZI DISTRICT: EDUCATOR EXPERIENCES

by

LAVANYA RABILALL

submitted in accordance with the requirements

for the degree

MASTER OF EDUCATION

in

CURRICULUM AND INSTRUCTIONAL STUDIES

in the

COLLEGE OF EDUCATION

at the

UNIVERSITY OF SOUTH AFRICA

Supervisor: Dr D. C. Lees

February 2026

DECLARATION

NAME: Lavanya Rabilall

STUDENT NUMBER: 61715581

TITLE OF THE DISSERTATION: EXPLORING GENERATION ALPHA MULTIPLE INTELLIGENCES FOR IMPROVED CLASSROOM LEARNING IN THE UMLAZI DISTRICT: EDUCATOR EXPERIENCES

I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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I, Dr D.C. Lees, declare that the dissertation has been submitted to originality checking software.

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DEDICATION

This dissertation is dedicated with absolute gratitude and love to my wonderful parents, Rajendra and Sadhna Rabilall, whose support, encouragement, and sacrifices have been the foundation of my academic and personal journey. Your belief in me has been my greatest strength.

To my beloved sister, Shamika Rabilall, thank you for your constant reassurance and kindness, and for always being by my side. Your presence has been a constant source of comfort and motivation.

To my extended family, dear friends, and colleagues, your guidance, encouragement, and support have significantly shaped and inspired this academic journey. I am deeply appreciative of the roles you have all played in helping me reach this point.

A special mention to my two fur babies, Lara-Jean and Dora — your love and joyful presence brought light and peace during the most challenging moments of this journey.

To all of you, thank you for your contribution to my success.

ACKNOWLEDGEMENTS

I give all glory, honour, and praise to God for granting me the wisdom, strength, and perseverance to complete this academic journey. Without divine guidance, this work would not have been possible.

My sincere appreciation goes to my supervisor, Dr D. C. Lees, whose exceptional mentorship, unwavering support, and invaluable guidance have been instrumental throughout this research process. Your dedication, professionalism, and prompt feedback have not only refined my work but also inspired my growth as a scholar. Thank you for believing in me and for walking this journey with such patience and grace.

I would like to express heartfelt gratitude to the following individuals and institutions whose contributions made this study possible:

- The KwaZulu-Natal DoE, the Umlazi District officials, and the school principals who graciously permitted me to conduct this research.
- The UNISA College of Education Ethics Review Committee, for their ethical clearance and approval of my study.
- The Grade Seven educators who participated in the research — thank you for your openness, time, and willingness to share your classroom experiences and insights.
- My language editor, for your meticulous attention to detail and professional support in enhancing the clarity and quality of this document.

To my family, friends, and colleagues, thank you for your unwavering encouragement, love, and support. Your words of motivation and belief in me have kept me going during the most challenging moments.

A special thanks to my two fur babies, Lara-Jean and Dora, whose unconditional love and comforting presence brought joy and calm during long hours of writing and reflection.

This journey has been one of growth, resilience, and purpose. I am deeply grateful to everyone who contributed to making this dissertation a reality.

ABSTRACT

The rapid transformation of the educational landscape requires teaching methodologies that respond to the diverse learning needs of Generation Alpha learners, particularly within under-resourced South African contexts. This study explored how Grade Seven educators in primary schools in the Umlazi District, KwaZulu-Natal, employ teaching methodologies aligned with Howard Gardner's Multiple Intelligences theory to enhance teaching and learning. The study addressed the need to understand how educators adapt pedagogy for diverse learners and the contextual challenges that influence implementation. An exploratory design and qualitative approach, guided by an interpretivist paradigm and a multiple case study strategy, were employed. Data were generated through semi-structured interviews and direct classroom observations involving 12 purposively selected Grade Seven educators across six schools. The findings revealed three key insights. First, educators demonstrated a stronger reliance on certain intelligences, particularly verbal-linguistic, interpersonal, and, to a lesser extent, visual-spatial intelligences, through practices such as discussion, explanation, group work, and the use of visual aids. However, limited integration of bodily-kinaesthetic, musical, and naturalistic intelligences was observed, indicating an imbalance in the application of MI-informed teaching. Second, the uneven implementation of multiple intelligences was shaped by contextual constraints, including overcrowded classrooms, limited teaching resources, language diversity, learner behavioural challenges, and heavy workloads, which restricted educators' ability to incorporate more interactive and diverse intelligence-based approaches. Third, the findings revealed that insufficient access to sustained and contextually relevant professional development limited educators' understanding and confident application of MI-informed teaching practices, particularly in relation to less dominant intelligences.. The study recommends strengthening MI-informed teaching through targeted professional development, improved resource provision, and greater institutional support to enable a more balanced and inclusive integration of all intelligences in classroom practice, thereby enhancing learning for Generation Alpha learners in disadvantaged primary school contexts.

Key concepts: *Disadvantaged schools, Generation Alpha, Grade Seven, primary school, multiple intelligences, teaching methodologies, Umlazi District.*

OPSOMMING

DIE VERKENNING VAN GENERASIE ALPHA SE MEERVOUDIGE INTELLIGENSIES VIR VERBETERDE KLASKAMERLEER IN DIE UMLAZI-DISTRIK: OPVOEDERS SE ERVARINGS

Die vinnige transformasie van die onderwyslandskap vereis onderrigmetodes wat reageer op die uiteenlopende leerbehoeftes van Generasie Alpha-leerders, veral binne onderbefondsde Suid-Afrikaanse kontekste. Hierdie studie het ondersoek hoe Graad Sewe-opvoeders in laerskole in die Umlazi-distrik, KwaZulu-Natal, onderrigmetodes gebruik wat in lyn is met Howard Gardner se Teorie van Meervoudige Intelligensies om onderrig en leer te verbeter. Die studie het die behoefte aangespreek om te verstaan hoe opvoeders hul pedagogiek aanpas vir diverse leerders en die konteksuele uitdagings wat implementering beïnvloed. ’n Verkennende ontwerp en kwalitatiewe benadering, gelei deur ’n interpretivistiese paradigma en ’n meervoudige gevallestudie-strategie, is gebruik. Data is gegenereer deur middel van semi-gestruktureerde onderhoude en direkte klaskamerwaarnemings met 12 doelbewus gekose Graad Sewe-opvoeders uit ses skole. Eerstens het opvoeders ’n sterker afhanklikheid van sekere intelligensies getoon, veral verbaal-linguistiese, interpersoonlike en, in ’n mindere mate, visueel-ruimtelike intelligensies, deur praktyke soos bespreking, verduideliking, groepwerk en die gebruik van visuele hulpmiddels. Daar is egter beperkte integrasie van liggaamlik-kinestetiese, musikale en naturalistiese intelligensies waargeneem, Tweedens is die ongelyke implementering van meervoudige intelligensies beïnvloed deur konteksuele beperkings, insluitend oorvol klaskamers, beperkte hulpbronne, taaldiversiteit, leerdergedragsuitdagings en swaar werkslading, Derdens het die bevindings getoon dat onvoldoende toegang tot volgehoue en konteks-relevante professionele ontwikkeling opvoeders se begrip en selfvertroue in die toepassing van MI-gebaseerde onderrig beperk het. Die studie kom tot die gevolgtrekking dat die versterking van MI-gebaseerde onderrig doelgerigte professionele ontwikkeling, verbeterde hulpbronvoorsiening en groter institusionele ondersteuning vereis om ’n meer gebalanseerde en inklusiewe integrasie van alle intelligensies in klaskamerpraktyk moontlik te maak, en sodoende leer vir Generasie Alpha-leerders in benadeelde laerskoolkontekste te verbeter.

Sleutelbegrippe: Benadeelde skole; generasie alpha; graad sewe; laerskool; meervoudige intelligensies; onderrigmetodologieë; Umlazi-Distrik.

ISIFINYEZO

UKUHLOLA I-MULTIPLE INTELLIGENCES YE-GENERATION ALPHA UKUZE KUTHUTHUKISWE UKUFUNDA EKILASINI ESIFUNDENI SASE-UMLAZI: OKUHLANGENWE NAKHO KOTHISHA

Ukuguquka okusheshayo kwendawo yezemfundo kudinga izindlela zokufundisa eziphendula ezidingweni zokufunda ezihlukahlukene zabafundi beGeneration Alpha, ikakhulukazi ezimweni zaseNingizimu Afrika ezinezingqinamba zezinsiza. Lolu cwaningo luhlolisise ukuthi othisha beBanga lesi-7 ezikoleni zamabanga aphansi esifundeni sase-Umlazi, KwaZulu-Natal, basebenzisa kanjani izindlela zokufundisa ezihambisana nombono ka Howard Gardner we-Multiple Intelligences ukuthuthukisa ukufundisa nokufunda. Ucwaningo lubhekane nesidingo sokuqonda ukuthi othisha balungisa kanjani indlela yabo yokufundisa ukuze bahlangabezane nezidingo zabafundi abahlukene kanye nezinselelo zesimo ezithinta ukusetshenziswa kwalezi zindlela. Kwase kusetshenziswa umklamo wokuhlola kanye nendlela yekhwalithi, eqondiswa yipharadayimu ye-interpretivist kanye nesu locwaningo lwezimo eziningi. Idatha yaqoqwa ngokusebenzisa izingxoxo ezihlelwe kancane kanye nokubuka okuqondile ekilasini kubafundisi abayi-12 abakhethwe ngenhloso, abavela ezikoleni eziyisithupha. Okutholakele kwaveza izinto ezintathu ezibalulekile. Okokuqala, othisha babonise ukuthembela kakhulu kwezinye izinhlobo zobuhlakani, ikakhulukazi ubuhlakani bolimi (verbal-linguistic), ubuhlakani bokuxhumana nabanye (interpersonal), kanye nobuhlakani bokubona (visual-spatial), ngokusebenzisa izindlela ezifana nokuxoxa, ukuchaza, umsebenzi wamaqembu kanye nokusetshenziswa kwezinsiza ezibonakalayo. Nokho, kubonakale ukuntuleka kokusetshenziswa kobuhlakani bokunyakaza (bodily-kinaesthetic), bomculo (musical), kanye nobemvelo (naturalistic), Okwesibili, ukusetshenziswa okungalingani kwalobu buhlakani kuthonywe yizinselelo zesimo ezifana nokugcwala kwamakilasi, ukushoda kwezinsiza, ukwehluka kwezilimi, izinkinga zokuziphatha kwabafundi kanye nomthwalo omkhulu womsebenzi, okunciphisa ikhono lothisha lokusebenzisa izindlela ezahlukene nezisebenzisanayo. Okwesithathu, okutholakele kubonise ukuthi ukuntuleka kokuthola ukuqeqeshwa okuqhubekayo nokuhambisana nesimo kwenza kube nzima kothisha ukuqonda nokusebenzisa ngokuzethemba izindlela ezihambisana ne-MI, ikakhulukazi lezo ezingasetshenziswa kakhulu. Ucwaningo luphetha ngokuthi ukuqinisa ukufundisa okusekelwe ku-MI kudinga ukuqeqeshwa

okuqondisiwe, ukuthuthukiswa kwezinsiza, kanye nokwesekwa okuqinile kwezinhlangano ukuze kube nokusetshenziswa okulinganayo nokubanzi kwazo zonke izinhlobo zobuhlakani ekilasini, ngaleyo ndlela kuthuthukiswe ukufunda kwabafundi beGeneration Alpha ezikoleni ezinezinsiza ezilinganiselwe.

Amagama angukhiye: iGeneration alpha, imfundo kaGrade isikhombisa, isifunda sika-Umlazi, izikole ezingaphansi kwentuthuko, izindlela zokufundisa, ukuhlukahluka kwabafundi, ukufundisa okuhlukanisiwe, ubuhlakani obuningi.

ACRONYMS AND ABBREVIATIONS

ACE	Advanced Certificate in Education
ASER	Annual Status of Education Report
Bed	Bachelor of Education
BERA	British Educational Research Association
CAPS	Curriculum Assessment Policy Statement
DBE	Department of Basic Education
DBSA	Development Bank of Southern Africa
DoE	Department of Education
EMS	Economic and Management Sciences
FET	Further Education and Training
GA	Generation Alpha
KZN	KwaZulu-Natal
MI	Multiple Intelligences
NDOH	National Department of Health
OECD	Organisation for Economic Co-operation and Development
PGCE	Postgraduate Certificate of Education
SMT	School Management Team
STATS SA	Statistics South Africa
STEM	Science, Technology, Engineering and Mathematics
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund.
UNISA	University of South Africa

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CHAPTER ONE: ORIENTATION

1.1. INTRODUCTION

Behind every classroom door lies diversity (Lewis, Wheeler & Carter, 2027), reflecting the reality that learners differ in their language use, learning styles, developmental levels, cultures, socio-economic backgrounds, and types of intelligences. Good educators are therefore expected not only to teach but also to evolve with the changes presented to them (Botha, 2022). In contemporary classrooms, this challenge is intensified by the emergence of Generation Alpha (GA) learners, born between 2010 and 2024, who are growing up in a rapidly changing, technology-driven world (Botha, 2022).

The Fourth and Fifth Industrial Revolutions have significantly reshaped the skills required for future success, placing emphasis on critical thinking, problem-solving, adaptability, and continuous learning (Fisher, 2017). However, there remains a noticeable disconnect between these global educational expectations and the pedagogical practices commonly implemented in classrooms. Traditional educator-centred methodologies, such as direct instruction, continue to dominate, often limiting opportunities for learners to actively engage with content and develop higher-order thinking skills (Mbatha, 2022). While such approaches may have certain advantages, their continued dominance raises concerns about their suitability for addressing the diverse and evolving learning needs of GA learners.

GA learners are often described as adaptable and responsive to dynamic learning environments (Bordia, 2022). However, when teaching practices do not align with these characteristics, meaningful learning may be compromised. This suggests that teaching methodologies must move beyond uniform approaches and instead respond to the diversity of learners' abilities and ways of learning. In this regard, Howard Gardner's Theory of Multiple Intelligences (MI) provides a relevant theoretical framework. The theory proposes that learners possess a range of intelligences, including linguistic, logical-mathematical, spatial, bodily-kinaesthetic, musical, interpersonal, intrapersonal, and naturalistic (Gardner, 1983), and therefore require varied approaches to learning.

Drawing from my teaching experience in the Umlazi District in KwaZulu-Natal, I have observed that although learners, particularly those from disadvantaged backgrounds, often demonstrate resilience and a strong motivation to succeed (Carrol & Burke, 2010), teaching methodologies do not always accommodate their diverse intellectual strengths. While educators may attempt to adapt their teaching, the persistence of predominantly educator-centred approaches suggests a misalignment between learner needs and instructional practices. This raises critical questions about how teaching methodologies can be aligned with MI to better support GA learners in disadvantaged contexts.

Therefore, this study aims to explore how educators implement teaching methodologies aligned with MI to enhance classroom learning for GA learners in primary schools in the Umlazi District. The background to the study is presented in the next section

1.2. BACKGROUND TO THE STUDY

The rationale for this study was to explore how educators apply MI-informed teaching methodologies to support GA learners in disadvantaged primary schools in the Umlazi District, KwaZulu-Natal, with the aim of improving classroom learning experiences and academic outcomes. While existing literature acknowledges the need for pedagogical adaptation for modern learners (White, 2021), there is limited research that specifically examines how such approaches are implemented in disadvantaged South African primary school contexts.

Internationally, education systems are increasingly required to equip learners with 21st-century skills such as critical thinking, collaboration, creativity, communication, and digital literacy (Trilling & Fadel, 2009). These competencies are particularly relevant for GA learners, who are growing up in digitally connected and rapidly evolving environments (Ahmed & Ahmad, 2023). However, without responsive and inclusive teaching methodologies, learners may not fully develop these essential skills. This highlights the need for teaching methodologies that are not only innovative but also responsive to learners' diverse intellectual abilities, as proposed by the MI framework.

Within the South African context, these global shifts have significant implications for teaching and learning. Although the Curriculum and Assessment Policy Statement (CAPS) provides a structured framework for curriculum delivery (Department of Basic

Education [DBE], 2011), it does not explicitly prescribe how educators should address learner diversity in practice. As a result, educators are required to interpret and implement teaching approaches that are responsive to their specific classroom contexts. This creates an opportunity for the integration of MI-informed pedagogy; however, the extent to which this occurs in practice remains unclear.

Furthermore, South African classrooms are characterised by significant diversity and inequality, which shape both teaching and learning processes. Learners come from varied socio-economic and cultural backgrounds, bringing different experiences, knowledge systems, and ways of engaging with content (Nenweli, 2019). Many learners are also affected by poverty-related challenges, which influence their access to learning and participation in the classroom. These contextual realities require teaching approaches that are flexible, inclusive, and responsive to learners' needs.

Umlazi, located in eThekwini in KwaZulu-Natal, represents a critical case for this study. It is one of the largest townships in South Africa, with a population of over 450,000 people, predominantly Black African (97.9%), and where IsiZulu is the main language spoken by approximately 88.1% of the population (Statistics South Africa, 2023). Despite its proximity to urban development, Umlazi continues to experience persistent socio-economic challenges, including limited access to resources and lower levels of educational attainment. For example, only 15.3% of individuals aged 20 and older have completed matric, and just 4.9% hold a higher qualification (Statistics South Africa, 2023). These conditions negatively affect teaching and learning and highlight the need for contextually relevant pedagogical approaches to overcome the challenges that learners face.

While MI offers a framework for addressing learner diversity, its practical implementation in disadvantaged classrooms remains underexplored. There is limited empirical research that examines how educators integrate MI into their educator practices within the context of GA learners in South African primary schools. This study therefore addresses this gap by exploring how educators in the Umlazi District implement MI-informed methodologies and by examining the contextual factors that enable or constrain these practices. The study's problem formulation is discussed in the next section.

1.3. PROBLEM FORMULATION

I have been teaching Grade Seven in the Umlazi District for seven years. I have come to understand that learners from a low socio-economic status do not always immediately grasp rudimentary academic concepts presented in lessons (Spaull & Jansen, 2019) This is largely due to factors such as limited background knowledge, lack of access to learning resources, and inadequate parental academic support (Department of Basic Education [DBE], 2014). These challenges negatively affect learners' ability to engage meaningfully in lessons, understand abstract concepts, and develop confidence in their academic abilities (Du Plessis & Letshwene, 2023).

While these challenges are well documented in the South African context, much of the existing research focuses on structural and socio-economic barriers to learning, with less attention given to how classroom pedagogy can be adapted to support learners within these constraints. This highlights a gap in understanding how teaching approaches can respond more effectively to learner diversity in disadvantaged contexts.

At the same time, GA learners (born between 2010 and 2024) are growing up in a rapidly changing, technology-driven world that requires advanced cognitive and adaptive skills (Dasoon & Naidoo, 2024). These learners often show a preference for interactive, personalised, and visually engaging learning environments (McCrindle & Fell, 2020; Tapscott, 2009). However, despite these changing learner characteristics, traditional educator-centred methodologies, such as rote learning, lecturing, and direct instruction, continue to dominate many classrooms (Chakma, 2022; Anon, 2017). This misalignment between learner needs and teaching practices contributes to learner disengagement and shallow understanding of content, particularly in disadvantaged schools (Jansen, 2019; Spaull, 2013).

Although CAPS (Department of Basic Education [DBE], 2011) provides a framework for curriculum delivery, it does not prescribe specific pedagogical approaches, often resulting in educators relying on familiar traditional methods (Dixon et al., 2018). This creates a need for alternative teaching methodologies that can better address learner diversity and promote meaningful learning.

In this regard, Howard Gardner's Theory of MI(1983) offers a potential framework for addressing these challenges. By recognising that learners possess different

intellectual strengths, MI supports the use of varied and inclusive teaching methodologies that can enhance learner engagement and understanding, even in disadvantaged environments. However, there is limited research that explores how MI-informed teaching methodologies are implemented in disadvantaged primary school contexts, particularly in relation to GA learners.

The socio-economic conditions in the Umlazi District further intensify these challenges, as many learners lack access to essential learning resources, including the internet and supportive learning environments (Van den Berg et al., 2017). As education systems continue to evolve in response to the Fourth and Fifth Industrial Revolutions (Schwab, 2017), there is an increasing need to explore teaching methodologies that can support learners in developing critical skills despite contextual constraints (Arnold, Arntz & Gregory, 2018).

Therefore, this study seeks to address this gap by exploring how educators in the Umlazi District implement MI-informed teaching methodologies to enhance classroom learning for Generation Alpha learners. The study aims to examine how such approaches can support learner engagement, understanding, and participation within disadvantaged educational contexts. After formulating the problem, the research questions emerged, which are presented in the next section.

1.4. RESEARCH QUESTION

1.4.1. Main question

Based on the research problem outlined above, the main research question of this study was: How do Grade Seven educators in the Umlazi District utilise Generation Alpha learners' Multiple Intelligences to enhance learner engagement, participation, and understanding in the classroom?

1.4.2. Research sub-questions

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

i. What teaching methods do Grade Seven educators use to address Generation Alpha learners' Multiple Intelligences in the Umlazi District?
ii. What challenges do Grade Seven educators face in implementing teaching methods that cater to Generation Alpha learners' Multiple Intelligences in the Umlazi District?

iii. What support do Grade Seven educators receive to implement teaching methods that enhance Generation Alpha learners' Multiple Intelligences in the Umlazi District?

1.5. AIM OF RESEARCH

The aim and objectives of the research are articulated below:

1.5.1. Aim

To examine how Grade Seven educators in the Umlazi District utilise Generation Alpha learners' Multiple Intelligences to enhance learner engagement, participation, and understanding..

1.5.2. Objectives

The objectives of the study were threefold:

i. To explore the teaching methods used by Grade Seven educators to address GA learners' MI in the Umlazi District.

ii. To identify the challenges faced by Grade Seven educators in implementing teaching methods that cater to GA learners' MI in the Umlazi District.

iii. To explore the support received by Grade Seven educators in implementing teaching methods that enhance GA learners' MI in the Umlazi District.

1.6. THEORETICAL FRAMEWORK

The theoretical framework for this study is based on Howard Gardner's (1983) MI Theory. This theory explains that intelligence is not a fixed characteristic but rather a combination of various cognitive strengths. Gardner (1983) identified several types of intelligences, including verbal-linguistic, logical-mathematical, musical, bodily-kinaesthetic, interpersonal, intrapersonal, and naturalistic. This theory challenges traditional, academically focused definitions of intelligence and promotes a more inclusive view that values different learning styles. Its application is particularly relevant to GA learners in disadvantaged Umlazi classrooms, where personalised and varied teaching methodologies can help address, diverse learner needs and improve learner engagement, motivation, and academic outcomes. By aligning teaching methods with learners' diverse intelligences and incorporating elements such as movement, music, collaboration, and technology, educators can foster more meaningful learning experiences (Armstrong, 2009; Gardner, 1999; Sousa & Pilecki, 2018).

A comprehensive discussion of Gardner's MI theory and its specific relevance to GA learners in the Umlazi District is presented in Chapter Two.

1.7. RESEARCH METHODOLOGY

The systematic approach and techniques used to conduct research, including the tactics and instruments used to collect and evaluate data, are referred to as research methodology (Lichtman, 2023). This study drew on the research guidance of Merriam and Tisdell (2016) and Grant and Osanloo (2014) to inform its design and implementation. This study used an exploratory design, which is especially well-suited for examining teaching and learning the Umlazi area and understanding the data (Stebbins, 2018). This approach helped examine how educators modify their teaching methods to meet the learning needs of GA children in disadvantaged areas. The exploratory aspect of the study enabled a thorough understanding of the educational methodologies and lived experiences of Grade Seven educators in the Umlazi District. This, in turn, made it easier to develop inclusive and responsive teaching methods that consider the circumstances such learners face.

1.7.1. Research design

The study's research question was examined via exploratory research. Initially, I knew very little about the subject or phenomenon I was researching. From studying Lichtman (2023), I understood that as an educator in a primary school, it is challenging to comprehend how other educators perceive the various teaching methodologies in theoretical subjects and how their adaptations in teaching styles might influence learners' performance.

1.7.1.1. Research paradigm

A research paradigm is a philosophical framework that sets the foundation for the ontology, epistemology, and methodology of a study (Creswell, 2007). Abbadia (2022) elucidates that a research paradigm is a model, approach, or pattern that guides research, comprising a collection of concepts, viewpoints, or understandings that enable theories and methods to function effectively. This study was situated within the interpretivist paradigm, which emphasises understanding how individuals make meaning of their experiences within a specific social context. Interpretivism assumes that reality is subjective and socially constructed, making it suitable for research that seeks to explore participants' personal beliefs, feelings, and classroom practices rather

than testing objective hypotheses (Cohen, Manion & Morrison, 2011). My study aimed to understand the experiences of Grade Seven educators in addressing the MI of GA learners; it required rich, descriptive data rather than numerical measurements. The use of semi-structured open-ended interviews and direct observation of teaching is consistent with interpretivism's focus because they allow participants to share what they "see as their reality" in their own words and permit me to see participants behaving in their authentic teaching environments (Creswell, 2007, p. 15). This paradigm also supports the view that knowledge is co-created by me, as the researcher, and the participant, a hallmark of qualitative research (Creswell, 2007). As such, the interpretivist paradigm is most appropriate because it can explore lived experiences and meanings that cannot be conveyed through positivist quantitative approaches.

1.7.1.2. Research approach

To investigate how Grade Seven educators employ teaching methodologies influenced by Gardner's MI theory to support GA learners from disadvantaged backgrounds, a qualitative approach was adopted in this study.

A qualitative research approach is concerned with exploring and understanding the meanings individuals or groups assign to a social or human problem. Rather than measuring variables numerically, qualitative researchers seek to interpret participants lived experiences, perspectives, and realities in rich detail. Creswell and Poth (2018) have explained that qualitative research is characterised by its naturalistic, interpretive nature, where data are collected in authentic settings, and it becomes an instrument of data generation through methods such as interviews, observations, and document analysis. It is rooted in the belief that reality is socially constructed and can therefore only be understood by engaging directly with participants and interpreting their words, actions, and the contexts in which they occur. This approach is particularly valuable when the aim is to gain deep insight into processes, experiences, beliefs, or behaviours that cannot be captured statistically, and it allows for flexibility, inductive analysis, and the emergence of themes grounded in participants' own voices.

A qualitative approach was deemed most suitable for this study because the aim was not to measure or generalise behaviour, but to gain an in-depth understanding of how educators implement teaching methodologies to support disadvantaged GA learners in authentic classroom contexts. As the study aimed to explore educators' personal

experiences, reflections, challenges, and decision-making processes, a qualitative design enabled these complex and subjective realities to emerge in ways a quantitative approach could not. Through semi-structured open-ended interviews and classroom observations, the study captured the authentic voices of educators, the nuances of their instructional practices, and the ways in which they responded to learners' diverse needs; these are insights that would not have emerged from numerical data alone. The flexibility of a qualitative research approach also enabled me to probe further during interviews, observe naturally occurring behaviour, and interpret meaning within the social, emotional, and contextual environments of the classroom. Thus, a qualitative approach aligned directly with the interpretivist paradigm of the study and provided the most appropriate means of addressing the research questions.

1.7.1.3. Research strategy

The primary focus of this study was the current teaching methodologies used by educators in primary schools in Umlazi, KZN, to better cater to learners' MI. To this end, a multiple case study strategy was employed. The reason for using the intrinsic case study approach was its suitability for gaining a deep, nuanced understanding of a specific occurrence in the teaching methodologies used by educators in primary schools in Umlazi, KZN (Stake, 1995).

An intrinsic multiple case study strategy was selected for this research because the focus was on understanding a specific case in depth, rather than on generalising findings to other contexts. An intrinsic multiple case study is used when the case itself is of particular interest, and seeks to gain a rich, holistic understanding of its complexities (Stake, 1995). In this study, each *case* referred to the instructional practices of Grade Seven educators within one disadvantaged Umlazi primary school. The study therefore adopted a multiple-case strategy, as data were collected across more than one school, enabling comparison of teaching practices across different contexts characterised by socio-economic challenges, limited resources, and diverse learner needs. The purpose was not to test a theory or compare multiple settings, but to explore how educators teaching under these conditions navigate classroom realities, implement teaching methodologies, and respond to the needs of GA learners. This strategy enabled me to retain the natural complexity of the setting, capturing the lived experiences, challenges, and decision-making processes that would have been lost in a broader or more generalised study.

1.7.2. Research methods

Research methods refer to the systematic procedures, techniques, and tools that researchers use to collect, analyse, and interpret data to answer research questions and achieve study objectives. They provide a structured way of investigating phenomena and support the trustworthiness of the study by strengthening credibility, dependability, confirmability, and transferability (Creswell, 2007). Research methods can be broadly categorised as qualitative, quantitative, or mixed methods, depending on whether the focus is on numerical measurement, exploration of experiences, or a combination of both. To outline the study's research methods, I next describe the population, data generation methods, data analysis strategy, and methodologies for ensuring trustworthiness and authenticity.

1.7.2.1. Selection of participants

In this study, the sampling approach employed was purposeful sampling, a qualitative method used to select individuals capable of providing comprehensive and detailed insights on the subject matter under examination (Adom, Yeboah & Ankrah, 2016).

Twelve educators from six purposively selected schools, chosen to represent a range of contexts within the socio-economically disadvantaged area of Umlazi, were selected to participate in the study based on their current role of teaching Grade Seven learners in the Umlazi District. These schools were selected based on their accessibility, the presence of Grade Seven classes, and the willingness of school management to participate in the study, aligning with the principles of purposeful sampling aimed at obtaining rich data relevant to the research question (Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood, 2015). The inclusion criteria required that participants be Grade Seven educators with a minimum of two years of teaching experience, working with disadvantaged GA learners. Additionally, participants needed to be actively involved in classroom instruction, willing to provide honest and detailed reflections on their teaching methodologies, and available to participate in both semi-structured open-ended interviews and classroom observations. Educators were also required to be employed at schools within the Umlazi District and to demonstrate a commitment to professional engagement, ensuring that the data collected would accurately reflect teaching practices within this specific educational context.

The same educators selected for interviews were also observed by me during their regular classroom teaching to ensure congruence between articulated experiences and tangible instructional methods, thereby facilitating data analysis and interpretation (Creswell & Poth, 2018). In Chapter Three, a more detailed explanation of how the research participants were selected is provided.

1.7.2.2. Data generation

For qualitative research to yield thorough, in-depth data that captures participants' experiences and contextual reality, appropriate data generation techniques are crucial (Creswell & Poth, 2018). Researchers can fully explore participants' perspectives through semi-structured open-ended interviews, allowing them the freedom to explore new topics (Kvale & Brinkmann, 2009). By providing firsthand knowledge of participants' behaviours and activities in their natural settings, observations supplement interviews and provide a more thorough grasp of the topic under study (Merriam & Tisdell, 2016).

The data generation methods for this study included semi-structured open-ended interviews and direct classroom observations, providing a comprehensive understanding of educators' experiences of teaching methods within their classroom teaching environments (Abbadia, 2022). Semi-structured open-ended interviews were chosen for this study because they enabled candid discussions with educators about their experiences of using various teaching methodologies with GA learners from disadvantaged backgrounds. Classroom observations were equally important because they provided a firsthand opportunity to investigate how these methodologies are used in practice, thus supporting and enhancing the information gathered from the interviews. Together, these methods offered a comprehensive and validated understanding of how various teaching methodologies employed by educators catered to the MI of GA learners in the Umlazi District.

(i) Semi-structured open-ended interviews

Semi-structured open-ended interviews were used to analyse the complexities of educators' teaching methodologies (Creswell & Poth, 2018). The intention of conducting these interviews was to gain a comprehensive understanding of the experiences of educators in implementing appropriate teaching techniques tailored to the unique learning requirements of GA learners in the Umlazi District. The semi-

structured open-ended interviews method provided a balance between pre-planned inquiries and the freedom to explore unanticipated subjects that arose during conversations (Kvale & Brinkmann, 2009). I was able to gather rich, qualitative data using this method, which provided me with a thorough understanding of how educators perceive their methods to enhance learning for GA learners from disadvantaged contexts.

(ii) Observations

Observation is a widely used qualitative data generation method that enables researchers to directly witness teaching and learning processes in natural classroom settings (Merriam & Tisdell, 2016). This method is particularly valuable for exploring how educators apply specific teaching methodologies in practice.

Researchers are encouraged to move beyond self-reported data to observe actual instructional behaviours and methodologies (Angrosino, 2007). In my research on exploring GA MI for improving classroom learning in primary schools in Umlazi, KZN, observing classrooms offered direct insight into how educators use different instructional techniques with GA learners. By observing classes, I could note the practical use of teaching methods and MI-based methodologies to observe how these methods actively involve learners. This provided comprehensive, contextual information about educators' educational decisions and learners' reactions, enhancing the understanding of effective teaching methods in my research context. Data generation is further elucidated in Chapter Three, where a thorough discussion of how the data were collected is presented.

1.7.2.3. Data analysis

The primary goal of data analysis in qualitative research is to identify patterns, themes, and meanings in the gathered data, thereby enhancing comprehension of the topic being studied. To produce significant insights, I worked closely with the data during this usually interpretive and iterative process (Braun & Clarke, 2006).

(i) Semi-structured open-ended interviews

Data from the educator interviews were analysed and interpreted using thematic analysis, guided by the six-phase framework proposed by Braun and Clarke (2006; 2021).Thematic analysis was selected as it provides a systematic yet flexible approach for identifying and interpreting patterns of meaning across qualitative data. The

process began with familiarisation, during which I repeatedly read the interview transcripts and made preliminary notes. This was followed by the generation of initial codes, where meaningful segments of data were labelled in relation to the research questions. The third phase involved organising these codes into potential themes by clustering related ideas. In the fourth phase, I reviewed and refined the themes to ensure that they accurately reflected both the coded extracts and the overall dataset. Once refined, the themes were clearly defined and named to capture their essence and conceptual boundaries. The final phase involved producing the written analysis, selecting illustrative excerpts from the interviews, and linking the findings to the literature and theoretical framework. A detailed account of how each of these steps was applied in this study is provided later in Chapter Three.

(ii) Observations

Observation is a widely used qualitative data generation method that enables researchers to directly witness teaching and learning processes in natural classroom settings (Guest, MacQueen & Namey, 2012; Merriam & Tisdell, 2016). This method is particularly valuable for exploring how educators apply specific teaching methodologies in practice.

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1.8. TRUSTWORTHINESS, ASSUMPTIONS OF THE STUDY AND DELIMITATIONS OF THE STUDY.

As the researcher, it was my responsibility to ensure that both the data generation process and the data findings were credible and trustworthy. A standard critique of

qualitative research is that it may be influenced by the researcher's own beliefs, values, or biases, potentially compromising its authenticity and objectivity (Koch & Harrington, 1998; Merriam & Tisdell, 2016). Being aware of this, I took deliberate steps to uphold the rigour and integrity of my study by applying the four widely accepted criteria for trustworthiness in qualitative research: credibility, dependability, transferability, and confirmability (Lincoln & Guba, 1985).

Lincoln and Guba (1985) propose four key criteria for establishing trustworthiness in qualitative research: credibility, dependability, transferability, and confirmability. Credibility refers to the extent to which the findings accurately represent the participants' realities and is comparable to internal validity in quantitative research (Shenton, 2004). Dependability concerns the stability and consistency of the research process over time, requiring a transparent and traceable account of how the study was conducted (Babbie & Mouton, 2001). Transferability refers to the extent to which the findings can be applied to other contexts, which is facilitated by rich and detailed descriptions that enable readers to make informed comparisons (Shenton, 2004). Confirmability refers to the extent to which participant-bias, rather than researcher-bias shapes the findings, and it requires methodologies that demonstrate neutrality and transparency in the research process (Babbie & Mouton, 2001; Lincoln & Guba, 1985). These criteria serve as the foundation for ensuring rigour in qualitative research and guide researchers in demonstrating trustworthiness.

This study was based on several assumptions. It was assumed that the educators who participated in the study provided honest and accurate accounts of their teaching practices and experiences. It was also assumed that their responses would reflect practices that are common in similar disadvantaged classroom contexts within the Umlazi District.

The focus on Grade Seven educators was intentional, as this grade represents a critical transition phase in primary education where learners prepare for secondary schooling. At this stage, differences in learner abilities, learning needs, and intelligences are more clearly evident, making it an appropriate context for exploring the application of Multiple Intelligences in classroom practice.

This study was delimited to Grade Seven educators in selected primary schools within the Umlazi District. The focus on this specific grade and context was intentional to allow

for an in-depth understanding of teaching practices within a defined and manageable scope. The study further focused specifically on the use of Multiple Intelligences in teaching Generation Alpha learners, and did not extend to other grades, districts, or broader curriculum areas

The practical application of these four criteria is further discussed in Chapter Three, Section 3.5. The following section outlines the ethical considerations that guided the planning and conduct of this study

1.9. ETHICAL MEASURES

When embarking on this study, I was fully aware of the ethical and legal responsibilities associated with conducting research involving human participants, and the study was guided by the principles of transparency, respect, and the protection of participants' rights and well-being (Cohen et al., 2011; Creswell & Poth, 2018). Ethical approval for the study was obtained from the University of South Africa's College of Education Research Ethics Committee, and permission to conduct the research in schools was granted by the Umlazi District of the KZN Department of Education (DoE), allowing interviews and classroom observations to be conducted at the selected schools. Prior to data collection, all participants were provided with clear information about the study's purpose, procedures, and intended use of the data, and informed consent was obtained, with participants being made aware that their participation was voluntary and that they could withdraw at any stage without penalty (British Educational Research Association [BERA], 2018). To ensure privacy and confidentiality, pseudonyms were used for both participants and schools, and all data were used solely for research purposes, with participants' dignity and privacy respected throughout the study (McMillan & Schumacher, 2010). The study posed minimal risk to participants, although potential inconvenience due to time commitments was acknowledged and minimised by arranging interviews and observations at times convenient for them. After data collection, participants were debriefed and thanked for their contribution and were informed about how their input would be used in the study, ensuring transparency and reinforcing ethical research practice. The next section presents the research plan of action, detailing the steps that were taken to complete the study.

1.10. RESEARCH ACTION PLAN

Table 1.1 outlines the research action plan, which is fully discussed in Chapter Three.

Table 1.1: Action plan for the research (Adapted from Mtetwa & Ntosbi, 2025)

Guiding research question	**Subtopic**	**Sub-questions of the study**
How do educators in the Umlazi District experience and utilise GA learners' MI to enhance classroom learning?		i. What teaching methods do Grade Seven educators use to address GA learners' MI in the Umlazi District? ii. What challenges do Grade Seven educators face in implementing teaching methods that cater to GA learners' MI in the Umlazi District? iii. What support do Grade Seven educators receive to implement teaching methods that enhance GA learners' MI in the Umlazi District?
Paradigmatic suppositions	**Epistemological model**	Interpretive
	Methodological model	Qualitative
Theoretical framework	**Framework**	Gardner's Multiple Intelligences Theory (Gardner, 1983).
Selection of participants	**Purposive sampling**	Used to select 12 Grade Seven educators
Data collection	**Instrument**	Semi-structured open-ended interviews and observations
Data analysis	**Analysis and interpretation**	Thematic analysis
Measures for quality assurance	**Trustworthiness**	The trustworthiness of this qualitative study was guided by the four criteria proposed by Lincoln and Guba's (1985) framework for trustworthiness: credibility, transferability, dependability, and confirmability.

	Ethical measures	Acquired approval to conduct research from the Ethics committee at the University of South Africa, the Umlazi District office, as well as from school principals.

This section has outlined the research plan that structured the study. Definitions of the central terms of the study follow.

1.11. CLARIFICATION OF CONCEPTS

It is essential that the basic concepts of the research are defined and made explicit, ensuring a common and clear understanding of the main concepts used in this study. These definitions provide interpretations of key concepts as relevant to this study

1.11.1. Disadvantaged schools

Disadvantaged schools refer to educational institutions operating within contexts of systemic socio-economic constraints, including inadequate infrastructure, limited access to learning resources, and insufficient instructional support, which collectively hinder learner achievement and contribute to persistent educational inequalities (Jansen, 2019; Smith & Cekiso, 2020). In the South African context, these schools are often located in historically marginalised communities, where broader social and economic conditions continue to shape and limit learners' educational opportunities and outcomes (Jansen, 2019).

1.11.2. Generation Alpha

Generation Alpha refers to the cohort of children born from the early 2010s onwards who are growing up fully immersed in digital technologies and highly networked environments (White, 2021). These learners are understood to have distinct cognitive and social characteristics shaped by rapid technological advancements, which have implications for how they engage with educational content and teaching methodologies designed for future-focused learning environments (White, 2021).

1.11.3. Grade Seven

Grade Seven represents the final year of primary schooling within the South African basic education system and is typically attended by learners aged 12–13 years (Department of Basic Education [DBE], 2011). This phase is significant as it

consolidates foundational knowledge and skills while preparing learners for the academic and social demands of secondary education, making it a critical stage for strengthening learner readiness and performance (DBE, 2011).

1.11.4. Primary school

Primary school education refers to the foundational phase of formal education in South Africa, generally comprising Grades One to Seven, where learners develop essential literacy, numeracy, and cognitive skills (DBE, 2011). This phase plays a critical role in shaping learners' academic development and future educational success, as it establishes the core competencies required for progression into higher levels of schooling. (DBE, 2011).

1.11.5. Multiple intelligences

The theory of Multiple Intelligences (MI), proposed by Howard Gardner (1983), conceptualises intelligence as a set of distinct but interrelated cognitive capacities rather than a single, fixed ability. These include linguistic, logical-mathematical, spatial, musical, bodily-kinaesthetic, interpersonal, intrapersonal, and naturalistic intelligences. This perspective challenges traditional IQ-based views of intelligence and supports more inclusive and differentiated approaches to teaching and learning, recognising that learners demonstrate strengths in different areas (Gardner, 1983).

1.11.6. Teaching methodologies

Teaching methodologies refer to the structured approaches and strategies employed by educators to facilitate learning, taking into account curriculum requirements, learner diversity, and the broader socio-cultural context (Jansen, 2019). These methodologies range from traditional teacher-centred approaches to more learner-centred practices, and their effectiveness is largely determined by how well they respond to learners' needs and promote meaningful engagement with content. (Jansen 2019).

1.11.7. Umlazi District

The Umlazi District refers to a township-based educational context within KwaZulu-Natal, South Africa, characterised by diverse socio-economic challenges, resource constraints, and linguistic diversity (Stake, 1995). Research conducted in this district highlights the unique contextual factors, including resource limitations, linguistic diversity, and learner variability, that shape educational practices and outcomes in the region's public-school sector.

1.12. DIVISION OF CHAPTERS

This dissertation consists of five chapters:

1.12.1. Chapter One:

Chapter One provides an orientation to the study by presenting the background and context, the research problem, and the research questions guiding the investigation. The aim and objectives of the study are outlined, and the theoretical framework underpinning the research is introduced. A brief overview of the research methodology and ethical considerations is also provided, followed by an outline of the structure of the dissertation.

1.12.2. Chapter Two:

Chapter Two presents the theoretical framework and literature review informing the study. It explores Gardner's Theory of MI and its relevance to teaching and learning, discusses generational developments in education with specific reference to GA learners, and considers the implications for contemporary classroom practice. This chapter also examines the South African educational context, including issues of inequality and resource constraints, and reviews teaching methodologies that support diverse learners.

1.12.3. Chapter Three:

Chapter Three outlines the research methodology adopted in the study. It explains the interpretivist paradigm, qualitative research approach, and multiple case study design. The chapter further describes the sampling process, participant selection, data generation methods, and thematic analysis procedures. Ethical considerations and strategies used to ensure trustworthiness are also discussed.

1.12.4. Chapter Four:

Chapter Four presents and interprets the findings of the study based on data generated through educator interviews and classroom observations. The findings are organised into themes and sub-themes that reflect educators' experiences, teaching practices, and the challenges and opportunities associated with teaching GA learners.

1.12.5. Chapter Five:

Chapter Five provides a synthesis of the study by summarising the key findings and drawing conclusions in relation to the research questions and objectives. The chapter outlines the limitations of the study and offers recommendations for teaching practice

and future research, highlighting the study's contribution to understanding teaching and learning for GA learners in disadvantaged contexts.

1.13. CHAPTER SUMMARY

In Chapter One, I introduced the dissertation and provided an overview of the study, which establishes the context for the chapters that follow. I outlined the rationale for the research, highlighted the need for appropriate teaching methodologies, and presented the research problem, research questions, aims, and objectives. The background to the study was presented, followed by an overview of the research methodology and clarification of key concepts to avoid ambiguity. Overall, the chapter established the context, purpose, and direction of the study, highlighting the need to explore teaching methodologies that support GA learners in primary school classrooms. The next chapter presents relevant literature and outlines the theoretical framework that guided the study.

CHAPTER TWO: THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE ON MULTIPLE INTELLIGENCES, GENERATION ALPHA, AND CONTEMPORARY EDUCATIONAL CONTEXTS

2.1. INTRODUCTION

Chapter One provided a comprehensive introduction to the study, presenting the research topic, aim, research questions, and methodology, while also situating the study within the broader academic context. It discussed the rationale and significance of the research, highlighted gaps in existing research, and outlined how exploring suitable teaching methodologies can enhance learning for disadvantaged Generation Alpha (GA) learners in the Umlazi District in KwaZulu-Natal (KZN).

Chapter Two expands on this basis by thoroughly examining the theoretical framework and literature review that guided the research. Undertaking a literature review is a crucial scholarly aspect that not only synthesises existing knowledge but also identifies gaps in knowledge and highlights the significance of a study within a broader academic context (Taherdoost, 2023). The literature review presented in this chapter begins by outlining the theoretical framework that lays the foundation of this study, focusing on Howard Gardner's (1983) Theory of Multiple Intelligences (MI) and its relevance to GA learners. It then explores contemporary teaching and learning methodologies, highlighting methodologies that address diverse learning needs in the classroom. The review also examines the educational challenges faced by learners from disadvantaged backgrounds in South Africa, including issues of access, engagement, and resource limitations. Furthermore, it considers the implications of the Fourth and Fifth Industrial Revolutions for education, particularly how technological advancements can shape learning experiences. Through this review, the study situates its investigation within existing research, providing a foundation for understanding how educators address MI in Grade Seven classrooms.

2.2. THEORETICAL FRAMEWORK

Kivunja and Kuyini (2017) define a theoretical framework as a structured foundation based on scholarly theory that supports the development of the research problem, objectives, and methodology. For this study, which explores educators' experiences of GA learners' MI for improved classroom learning, Gardner's Theory of MI serves as the primary theoretical framework. It offers a relevant and structured lens through

which the study examines how educators recognise, interpret, and respond to diverse learner MI in their daily classroom teaching.

Gardner's (1983) theory challenges the traditional notion of a single measure of intelligence by introducing multiple forms of intelligence that learners possess to varying degrees. However, while the theory has been widely acknowledged in educational discourse, its practical application in classroom contexts, particularly in disadvantaged settings, remains inconsistent and underexplored. This suggests that although MI offers a valuable framework for recognising learner diversity, there is a gap between its theoretical potential and its implementation in everyday teaching practices.

In the context of this study, MI is not only used as a descriptive framework, but as an analytical lens to examine how educators interpret and apply diverse intelligences within constrained classroom environments.

This theoretical underpinning is particularly significant in a socio-economic context such as Umlazi, where challenges like poverty, limited educational resources, and language barriers can further complicate the teaching and learning processes. A theoretical framework that values individual learner profiles and integrates modern teaching methodologies can make a meaningful contribution to improving educational equity and engagement in disadvantaged environments. A discussion of Gardner's Theory of MI follows.

2.2.1. Gardner's Theory of MI

Gardner (1999) has proposed that intelligence cannot be described as a single concept; it includes a wide variety of human capacities.

According to Gardner (1983; 1999), human intelligence comprises eight distinct modalities: linguistic, logical-mathematical, spatial, musical, bodily-kinaesthetic, interpersonal, intrapersonal, and naturalistic. Logical-mathematical intelligence involves the ability to think abstractly, reason logically, and solve numerical or scientific problems (Gardner, 1983). The capacity to perceive and mentally manipulate spatial relationships characterises visual-spatial intelligence (Gardner, 1993). The effective use and coordination of one's physical body to express ideas or perform tasks demonstrates bodily-kinaesthetic intelligence (Gardner, 1983). A strong sensitivity to rhythm, pitch, tone, and sound patterns defines musical intelligence (Gardner, 1999).

Verbal-linguistic intelligence entails the ability to use language effectively for communication and comprehension (Gardner, 1983). Interpersonal intelligence refers to the ability to understand and interact effectively with others, while intrapersonal intelligence involves self-awareness and the capacity to understand one's own emotions, motivations, and goals (Gardner, 1983; 1999). Lastly, naturalistic intelligence is the ability to recognise, categorise, and draw upon patterns in nature and the environment (Gardner, 1999).

This theory is significant in the context of disadvantaged GA learners, as it acknowledges the diversity of learners' strengths beyond traditional academic metrics (Cherry, 2023). In a typical Umlazi primary school classroom, often characterised by large class sizes, limited resources, and varying levels of foundational knowledge, educators must employ diverse methodologies to engage learners in meaningful ways. Gardner's MI theory offers a flexible pedagogical lens for designing lessons that cater to the MI of learners (Gardner, 1999). For instance, educators may enhance linguistic intelligence through storytelling and reading circles, support bodily-kinaesthetic intellegence via drama and movement-based activities, or appeal to musical intelligence through rhythm and song (Armstrong, 2009).

While Gardner's categorisation provides a useful structure for understanding learner diversity, it is important to note that these intelligences do not operate in isolation. Instead, they interact dynamically within classroom contexts, requiring educators to adopt flexible and integrated teaching approaches.

This has significant implications for disadvantaged classrooms, where rigid, one-size-fits-all methodologies may fail to accommodate the range of learner abilities present.

These approaches not only stimulate engagement but also boost confidence, participation, and retention, especially in learners who might otherwise feel excluded in traditional, rigid classroom settings (Morgan, 2021). The following section explores Gardner's MI theory in the context of classrooms in the Umlazi District.

2.2.2. Exploring Gardner's theory of MI in Umlazi District classrooms

Gardner's Theory of MI (1983) provides a useful framework for understanding the diverse ways in which learners demonstrate intelligence. The theory challenges traditional views that prioritise academic ability and instead recognises a range of cognitive strengths. This perspective is particularly relevant when considering GA

learners, who are growing up in a digitally-connected world and display varied learning preferences and capabilities (Downes, 2012; Siemens, 2005).

In the context of the Umlazi District, where educators work within resource-constrained and diverse classrooms (Qushwa, Putri & Jali, 2025), the theory offers a valuable lens for supporting inclusive teaching and meaningful learner engagement.

Although MI theory emphasises learner diversity, its implementation in contexts such as Umlazi is shaped by structural constraints, including limited resources and large class sizes. This raises important questions about the extent to which MI can be effectively applied in practice, and whether educators are adequately supported to implement such approaches**.**

The following sections therefore outline the key components of Gardner's MI theory and its relevance to teaching and learning for GA learners in this context.

2.2.2.1. Visual-spatial intelligence

Visual-spatial intelligence encompasses the ability to think in images and visualise concepts, enabling learners to navigate spaces and comprehend visual representations (Gardner, 1983). Generation Alpha learners, raised in a visually rich and highly digitised world, thrive in environments that incorporate visual media, such as videos, interactive applications, and digital learning platforms (Wood, 2013; Prensky, 2001). In Umlazi classrooms, educators can utilise tools such as educational software, virtual simulations, and digital whiteboards to enhance student engagement and support the development of spatial reasoning skills (Fombona, Pascual-Sevillano & González-Vázquez, 2017), however, the integration of visual-spatial strategies in disadvantaged classrooms may be limited by restricted access to digital tools and visual resources. This highlights a tension between the theoretical value of this intelligence and the practical realities faced by educators in contexts such as Umlazi (DBE. 2014).

2.2.2.2. Verbal-linguistic intelligence

Verbal-linguistic intelligence relates to the capacity to use language effectively for communication, reading, writing, and storytelling (Gardner, 1999). This intelligence plays a critical role in multilingual educational contexts, such as those found in areas like Umlaz**i**, where educators face the challenge of language diversity in the classroom.

According to Gardner (2011), linguistic intelligence enables individuals to use language effectively for communication and comprehension. For GA learners who are still developing their language proficiency, creating language-rich environments through activities such as reading circles, storytelling, and debates can enhance both communication and understanding. Encouraging active participation in these activities can help GA learners articulate their ideas and engage more effectively with the course material (Rassool, Edwards & Bloch, 2006).

However, the integration of verbal-linguistic strategies in disadvantaged classrooms may be affected by language barriers, limited vocabulary development, and learners' lack of confidence when expressing themselves in English. This highlights a tension between the importance of language-based learning and the realities of multilingual classrooms such as those in Umlazi (DBE, 2014).

2.2.2.3. Musical-rhythmic intelligence

Musical-rhythmic intelligence involves sensitivity to sounds, rhythms, and music, which can significantly enhance cognitive processes such as memory and concentration (Gardner, 2011). Generation Alpha learners, who are familiar with technology that incorporates music and sound, may benefit from interactive lessons that include music-based activities, such as rhythm exercises or sound-based games (Mbatha, 2022). Educators in Umlazi can incorporate music and rhythm to support learning, particularly when teaching abstract concepts, as music can serve as a tool to improve memory retention and engage learners (Canfield, Wilson, Shute, King, Smith & Harley, 2023).

However, the integration of musical intelligence is often limited in classroom practice due to time constraints and a lack of resources or confidence among educators. This suggests that certain intelligences are underutilised despite their potential to enhance memory and engagement (Gardner, 1983).

2.2.2.4. Logical-mathematical intelligence

Logical-mathematical intelligence is concerned with logical reasoning, problem-solving, and the ability to analyse abstract concepts (Gardner, 2011). Generation Alpha learners' exposure to digital tools and technology from an early age enables them to excel in problem-solving tasks that involve critical thinking and mathematical reasoning. In Umlazi, educators can integrate coding platforms, digital simulations, and interactive games that promote logical-mathematical reasoning and foster a deeper

understanding of scientific and mathematical concepts (Qushwa et al., 2025). By creating interactive learning experiences, educators can further enhance GA's analytical thinking skills (Mbatha, 2022).

The development of logical-mathematical intelligence however, may be limited by gaps in foundational knowledge and the pressure to cover the curriculum. This suggests that learners may struggle to engage deeply with problem-solving tasks when teaching is rushed or overly content-driven (Spaull & Jansen, 2019).

2.2.2.5. Bodily-kinaesthetic intelligence

Bodily-kinaesthetic intelligence involves using one's body to express ideas or solve problems (Gardner, 2011). Generation Alpha learners, who are accustomed to fast-paced, multitasking environments, benefit from active learning methodologies that incorporate physical movement. In Umlazi classrooms, activities such as role-play, hands-on experiments, and movement-based learning can enhance engagement and help learners better grasp complex concepts (Sahito, Sahito, Uxma, & Phulpoto, 2025).

By incorporating physical tasks into lessons, educators can cater to the needs of GA learners who learn best through action and hands-on experiences (Miller, 2023).

The use of bodily-kinaesthetic strategies may be restricted by overcrowded classrooms and limited space, making it difficult for educators to incorporate movement-based learning. This reflects the gap between the value of active learning approaches and the physical constraints of the classroom environment (DBE, 2011).

2.2.2.6. Interpersonal intelligence

Intrapersonal intelligence refers to the ability to understand oneself, including one's emotions, motivations, and goals (Gardner, 2011). For GA, developing self-awareness and emotional regulation is particularly important in an era marked by constant connectivity and information overload (Beauchamp et al., 2022). Educators in Umlazi can support intrapersonal growth by incorporating reflective practices such as journaling, mindfulness exercises, and self-assessment activities (Kianinezhad, 2023). These methods help GA learners build emotional intelligence and self-regulation, which are critical skills for navigating the challenges of the modern world (Thompson, Umansky & Rew, 2023). While interpersonal strategies such as group work are commonly used, their effectiveness may be influenced by classroom management

challenges and learner behaviour. This highlights that collaborative learning requires careful structuring to be effective in diverse classroom settings (Vygotsky, 1978).

2.2.2.7. Intrapersonal intelligence

Intrapersonal intelligence refers to the ability to understand oneself, including one's emotions, motivations, and goals (Gardner, 2011). For GA, developing self-awareness and emotional regulation is particularly important in an era marked by constant connectivity and information overload (Beauchamp et al., 2022). Educators in Umlazi can support intrapersonal growth by incorporating reflective practices such as journaling, mindfulness exercises, and self-assessment activities. These methods help GA learners build emotional intelligence and self-regulation, which are critical skills for navigating the challenges of the modern world (Thompson et al., 2023). The development of intrapersonal intelligence may be limited by a strong focus on curriculum coverage, leaving little time for reflection and independent learning. This suggests that learners may not always be given opportunities to develop self-awareness and personal meaning-making (Armstrong, 2009)

2.2.2.8. Naturalistic intelligence

Naturalistic intelligence involves recognising and understanding patterns in the natural world, such as those found in plants, animals, and ecosystems (Gardner, 2011). While urbanised areas like Umlazi may not offer the same direct connection to nature as rural settings, educators can still engage GA learners by integrating environmental science projects, outdoor learning activities, and field trips. These hands-on experiences offer learners the opportunity to explore the natural world and develop a deeper understanding of environmental issues. By connecting learners to nature, educators can foster a sense of responsibility and awareness towards sustainability (Solomon et al., 2018).

Gardner's Theory of MI provides a comprehensive framework for understanding the diverse learning needs of GA learners. By recognising the different intelligences present in the classroom, educators in the Umlazi District can create more inclusive, engaging, and compelling learning experiences. The integration of naturalistic intelligence may be constrained by limited access to outdoor learning environments and relevant teaching resources. This reflects a gap between the theoretical

importance of connecting learning to real-world contexts and the realities of disadvantaged schooling environments (Gardner, 1999).

Adapting teaching methods to cater to these intelligences will enable educators to support the learning needs of GA better, fostering a more personalised and holistic educational environment. In the next part of this chapter, the relevance of Gardner's theory is discussed.

2.2.3. Relevance of Gardner's theory to the study context

The purpose of using Gardner's (1983) MI theory was to provide a framework for analysing how educators explore teaching methodologies to suit GA learners in the Umlazi District. This theory enabled me to map methodologies used by educators to enhance learner intelligences. It helped me to understand how educators identify and accommodate various intelligences among their learners; the instructional methodologies they commonly used to support diverse learning needs; and how contextual factors, such as limited resources, large class sizes, or socio-economic challenges impact the practical application of MI-based approaches (Mbatha, 2022). This aligns with the research of Armstrong (2009), who emphasise the importance of adapting teaching methods to meet the varied cognitive strengths of learners, especially in under-resourced educational contexts.

The application of this integrated theoretical framework enables the research to remain grounded in established literature while remaining flexible and responsive to the realities faced in under-resourced school environments (Trilling & Fadel, 2009).

The next section presents an investigation of international and local literature on adopting appropriate teaching methodologies for GA learners. It begins with a discussion of GA and the differences between generations of learners.

2.3. GENERATIONAL DYNAMICS IN EDUCATION: UNDERSTANDING LEARNER CHARACTERISTICS FROM BABY BOOMERS TO GA

As education continues to evolve, educators must recognise and understand the unique characteristics and learning preferences of learners across different generations (Beauchamp et al., 2022). This aspect of the literature review explores generational dynamics in education, focusing on how learner generational characteristics vary from Baby Boomers to GA and the implications for teaching and

learning practices. The first aspect discussed in this section is generational differences in education.

2.3.1. Generational differences in education

The study of generational differences in learners has gained significant attention as education continually evolves to meet the diverse needs of distinct cohorts (Chardonnens, 2025; Dimock, 2019 & Dolot, 2018). Understanding these differences is crucial for educators and curriculum developers, as it enables the design of teaching approaches that are responsive to learners' values, motivations, and preferred learning styles. Baby Boomers, born between 1946 and 1964, are often characterised by their strong work ethic and preference for traditional, educator-centred instruction (Charness, Fox & Mitchum, 2011). Generation X, born between 1965 and 1980, witnessed the emergence of technology and adapted to early digital learning environments (Prensky, 2001). Millennials, born between 1981 and 1996, are recognised for their technological fluency and preference for collaborative, interactive learning (Strauss & Howe, 1991). Generation Z, born after 1997, represents the first fully digital generation, marked by their comfort with instant access to information and online communication (Grace & Seemiller, 2024).

In the context of this study, understanding generational traits is essential because GA learners—born from 2010 onwards—exhibit even greater integration of technology and shorter attention spans, requiring dynamic, multimodal teaching methodologies (McCrindle & Fell, 2020). Examining previous generational patterns provides a framework for understanding how GA's unique learning preferences influence classroom engagement and the application of Gardner's MI. Thus, recognising generational evolution helps educators in diverse contexts, such as in Umlazi classrooms, to adapt teaching methods that respond effectively to learners' digital, social, and cognitive characteristics. The next aspect discusses the learners' characteristics.

2.3.2. Understanding learner characteristics

As education continues to evolve, understanding the unique characteristics of each generation of learners is crucial for educators seeking to engage and support diverse classrooms (Grace & Seemiller, 2024). The progression of generational cohorts highlights distinct shifts in learning styles, preferences, and the integration of

technology into the educational experience (Sahito, Sahito, Uxma, Phulpoto, 2025). Each generation brings its own set of expectations, challenges, and opportunities for instructional methodologies, which educators must adapt to foster effective learning environments.

Baby Boomers (born 1946–1964) grew up in a post-war era characterised by economic prosperity and social transformation. They tend to value traditional authority, structured learning environments, and face-to-face interactions with educators. Working with Baby Boomers may emphasise lecture-based instruction, formal assessments, and hierarchical classroom structures (Lancaster & Stillman, 2002).

Generation Xers (born 1965–1980) are known for their independence, scepticism, and adaptability (Oblinger & Oblinger, 2015). Having witnessed rapid technological advancements and societal changes, they tend to prefer flexible learning environments that accommodate their diverse needs and interests. As digital technology began to evolve during their formative years, Generation X developed a balanced approach to integrating technology into their learning. To engage Generation X learners, educators can incorporate experiential learning activities, collaborative projects, and technology-enhanced instruction, providing them with opportunities for both self-directed and group learning experiences (Strauss & Howe, 1991).

Millennials (born 1981–1996), also referred to as Generation Y, are characterised by their digital nativism, social consciousness, and desire for instant gratification. Having grown up with the internet, they value interactive learning experiences that are immediately relevant to their lives, alongside a preference for feedback-rich environments that support continuous learning and personal growth (Strauss & Howe, 1991). Educators engaging with Millennial learners should focus on utilising multimedia resources, gamified learning activities, and leveraging social media platforms to create dynamic, participatory learning experiences that cater to their digital fluency and demand for real-world connections (Strauss & Howe, 1991).

Generation Z (born 1997–2010) is the first truly digital generation, distinguished by technological fluency, entrepreneurial spirit, and a desire for authenticity in learning. Having grown up with smartphones, social media, and on-demand access to information, they prefer personalised learning experiences that allow for flexibility and independence (Grace & Seemiller, 2024). Peer collaboration and hands-on

exploration of concepts are key aspects of their learning preferences. To meet the needs of Generation Z learners, educators can utilise adaptive learning technologies, project-based learning, and student-centred pedagogies, creating an environment that promotes autonomy while still encouraging collaboration and real-world problem-solving (Grace & Seemiller, 2024).

Generation Alpha (born 2010 onwards), the newest cohort of learners, have been born into a hyperconnected world dominated by smartphones, social media, and artificial intelligence. Although it is still early to delineate specific characteristics of GAs, preliminary research suggests that they exhibit high levels of digital literacy, creativity, and a global awareness beyond their years (Charness, Fox & Mitchum, 2011). This generation will likely experience even greater integration of technology in their education, with personalised and immersive learning experiences that cater to their distinct preferences. As they continue to grow, educators will need to adapt teaching methodologies to accommodate the unique learning needs of GA, providing opportunities for digital fluency, critical thinking, and problem-solving in an increasingly complex and fast-paced world. Given the rapid development of new technologies and the changing landscape of the workforce, it will be crucial for educators to foster not only cognitive skills but also the adaptability and resilience necessary for this generation to thrive in a rapidly evolving world (McCrindle & Wolfinger, 2019).

Members of GA are expected to demonstrate an exceptionally high level of digital literacy, engaging naturally with advanced technologies such as artificial intelligence (AI), virtual reality (VR), and the Internet of Things (McCrindle & Wolfinger, 2019). As true digital natives, they are immersed in a world of instant information, dynamic interfaces, and interactive media from an early age. Their learning expectations are therefore shaped by exposure to adaptive technologies, requiring education systems to offer personalised, learner-paced environments that accommodate their diverse cognitive styles and preferences (Deloitte, 2020). Research indicates that GA will benefit most from learning ecosystems that emphasise critical thinking, creativity, and digital discernment, especially given their need to evaluate and synthesise information from multiple digital sources (Organisation for Economic Co-operation and Development [OECD], 2020). As this generation enters the workforce in the coming decades, competencies such as creativity, problem-solving, adaptability, and technological fluency will become paramount. According to Schwab (2016), the Fourth

Industrial Revolution is reshaping global labour demands, placing a premium on skills that cannot be easily automated—such as complex decision-making, emotional intelligence, and innovation. Educators will thus play a crucial role in cultivating these skills from early childhood through adolescence, ensuring that GA is equipped to thrive in a rapidly changing, interconnected world (Francisco & Linnér, 2023). Fostering digital citizenship, collaboration, and communication within global contexts will be vital to developing learners who are not just consumers of information but also creators and critical thinkers. The discussion of literature now proceeds to the implications of learning practices for GA learners.

2.3.3. Implications and learning practices for GA

Educators must acknowledge that teaching and learning cannot be approached in a uniform manner, especially when working with diverse generational cohorts (Mead, 2015). Understanding learners' generational characteristics enables educators to tailor instructional methodologies to meet the needs of each group (Grace & Seemiller, 2024). This is particularly relevant for GAs, who are growing up in a highly digital and interconnected world. As the youngest generation in the classroom, GA learners have unique characteristics that require adaptive teaching methods, including the integration of technology, fostering collaboration, and promoting critical thinking (Basye, 2018).

By focusing on the distinctive traits of GA learners, educators can design learning experiences that leverage their natural digital fluency, creativity, and global awareness (Grace & Seemiller, 2024). This can involve creating personalised learning opportunities, using technology to enhance engagement, and encouraging active problem-solving and exploration. As GA learners are expected to have a high level of digital literacy and a preference for interactive, hands-on experiences, incorporating these elements into teaching methodologies can help bridge the gap between their expectations and the learning environment (Bondie, Dahnke & Zusho, 2019).

To ensure effective teaching practices for GA learners, it is essential to understand how their experiences, particularly with technology, influence their cognitive and social development (Ray & Chakravarty, 2025). This generation’s preference for real-time, personalised content, combined with their ability to adapt to new technological tools, means that traditional teaching approaches may need to be adjusted to remain relevant (Schwab, 2016). Educators who embrace this generational shift, recognising

the strengths and challenges of GA learners, will be better equipped to foster meaningful and inclusive learning experiences. Ultimately, educators need to embrace generational diversity and leverage it as a source of strength in creating dynamic and effective classrooms (Bondie et al., 2019). While the literature provides extensive insights into the characteristics of GA learners and the role of MI in pedagogy, there remains a notable gap in research that explores how educators in disadvantaged South African contexts, such as in Umlazi classrooms, practically adapt their teaching methodologies to address both generational and socio-economic diversity. This gap underscores the need for research that examines the lived experiences of educators in resource-constrained environments, revealing how they identify and respond to diverse learner strengths to enhance engagement, participation, and learning outcomes.

While understanding generational differences provides useful background, an overemphasis on generational categorisation risks shifting focus away from the central concern of this study, namely how educators respond to learner diversity through MI-informed practices.

Therefore, this study prioritises Generation Alpha as the primary focus, specifically examining how their learning characteristics intersect with classroom challenges and the application of MI in disadvantaged contexts.

The discussion of literature now proceeds to an examination of how schools are disadvantaged in South Africa.

2.4. DISADVANTAGE IN EDUCATION IN THE SOUTH AFRICAN CONTEXT

Educational disadvantage is a global concern, with socio-economic factors strongly influencing learner outcomes across different contexts. For example, studies in the United States and the United Kingdom have shown that children from low-income families often experience lower academic achievement, reduced access to digital learning resources, and limited extracurricular opportunities compared with their more affluent peers (Blanden, Doepke & Stuhler, 2022). Similarly, in Brazil and India, educational disparities are closely linked to household income, parental education, and regional inequalities, highlighting that socio-economic disadvantage universally affects both access to and quality of education (Annual Status of Education Report [ASER],

2019; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020).

In the South African context, educators need to develop a deep understanding of the learners they serve, including their socio-economic backgrounds, demographics, and personal circumstances (Faiza & Daud, 2023). Faiza and Daud (2023) explains that children who receive quality education are better positioned to improve their economic prospects and make meaningful contributions to their country's growth. However, the quality and accessibility of education, as well as its capacity to transform lives, are heavily influenced by factors such as household income, parental education levels, race, and gender (UNESCO, 2020). In the Umlazi District, many learners come from socio-economically disadvantaged communities, often facing challenges such as overcrowded living conditions, limited access to digital technology, food insecurity, and inadequate parental support (Spaull & Jansen, 2019). These barriers not only impact learners' academic performance but also their emotional well-being and motivation, making the need for adaptive teaching methodologies particularly urgent.

When schools are under-resourced, it becomes imperative for educators and school leaders to adopt innovative and flexible methodologies to ensure that learning continues meaningfully, regardless of learners' home circumstances (Fleisch, 2008). This often requires educators to be more than just content deliverers; they must serve as mentors, motivators, and problem solvers who can adapt pedagogical practices to diverse and challenging contexts. Understanding the socio-economic realities faced by learners is thus central to developing inclusive, responsive, and contextually appropriate teaching methodologies (Nkosi, 2025). As the Development Bank of Southern Africa ([DBSA], n.d.) notes, addressing educational inequalities requires targeted interventions, including bridging the digital divide, providing psychosocial support, and strengthening educator training in disadvantaged areas.

This section of the literature review therefore highlights the urgent need to address systemic educational inequalities in South Africa. It explores critical sub-themes related to disadvantage in education, such as the impact of poverty, unequal resource distribution, and digital exclusion, while also emphasising the transformative role educators can play in motivating and empowering learners in contexts like Umlazi

(DBSA, n.d.; United Nations Children's Fund [UNICEF], 2021). The first subsection discusses the digital divide for disadvantaged learners.

2.4.1. The digital divide: Implications for disadvantaged learners

Van De Werfhorst, Kessenich and Geven (2022) have explained that in South Africa, the digital divide poses a significant challenge for disadvantaged learners in South African schools, exacerbating existing educational inequalities. Van Dijk (2002) defines the digital divide as the disparity between populations and areas with access to contemporary information and communication technology (ICT) and those that lack it or have limited access. This gap is especially significant in Umlazi, where numerous GA learners experience restricted access to computers, the internet, and various digital learning resources. These limitations affect their ability to participate fully in technology-enhanced learning experiences, develop digital literacy competencies, and benefit from innovative teaching methods that utilise ICT. By understanding this context, educators can more effectively apply methodologies, such as the MI framework, to address learners' varied strengths and mitigate the negative impacts of socio-economic and technological obstacles on learning in the classroom. The digital divide faced by disadvantaged learners in South African schools shows an imperative to recognise the challenges posed by limited access to technology and digital resources. Access to digital resources such as computers and the internet is limited for many learners in the Umlazi District, hindering their ability to engage effectively with modern educational tools and information (Van De Werfhorst et al., 2022). As highlighted by Achieng, Mourine and Margareth (2024), addressing the digital divide necessitates comprehensive efforts from policymakers, educators, and communities to provide adequate technology infrastructure and support for marginalised learners, thereby enhancing education delivery. Berson, Luo and Wang (2022) state that these disparities underscore the need to identify effective teaching methodologies that can bridge this gap. Learners lacking access to technology are often unable to engage meaningfully with educational resources, which hinders their academic progress. Consequently, bridging the digital divide in schools is paramount for ensuring equitable access to quality education and fostering learning environments for all learners, regardless of their socio-economic backgrounds (Makumane, Mataka, Sengai & Ngcobo, 2023).The ultimate priority for any education system is to maximise academic achievement for learners (Vadivel, Alam, Nikpoo & Ajanil, 2023). Learners who are

disadvantaged due to socio-economic issues are not motivated to be educated because they accept their situation. Parents of these learners are more concerned about making ends meet every day than their children's education, and educators often fail to recognise that children come from these types of households (Vadivel et al., 2023). Vadivel et al. (2023) argue that educators' primary aim in the classroom is to deliver lessons that enable learners to understand the material. Educators should understand the learners they teach on a year-to-year basis and plan lessons accordingly, rather than accepting comfort, as in the end, the learners are suffering and are not motivated to overcome the poverty gap, perform well, and build better lives (Vadivel et al., 2023). The literature review now proceeds to a discussion of the socio-economic barriers learners face in South Africa.

2.4.2. Meeting the needs of evolving classrooms: Overcoming socio-economic barriers to education through adaptability and innovation.

Fullan (2016) encourages South African educators to continually adapt and move forward with the times. Classroom landscapes are ever-changing; therefore, adaptability of educators is essential. As classrooms and demographics evolve, educators must remain adaptable and forward-thinking in their approach to teaching. This subsection highlights the importance of continually evolving teaching methodologies to meet the evolving needs of learners. Educators should consider the evolving classroom landscape and demographics, incorporating innovative methodologies that address learners' diverse needs and prepare them for success in an increasingly complex, changing world (Achieng et al., 2024). Demographics should always be considered when presenting subject matter to learners, as educators need to prepare for learners to learn what is presented to them (Cappy, 2016).

De Clercq (2020) has stated that South African schools are changing rapidly as the population grows, and as this happens, many South Africans find themselves trapped in the country's poverty cycle. Educators are the most significant stakeholders in learners' perspectives, as they can motivate learners to become passionate about learning by simply making the classroom experience enjoyable (De Clercq, 2020). Du Plessis and Mestry (2019) highlight that, despite many learners in South Africa coming from socio-economically disadvantaged backgrounds, they can evolve into very successful individuals when motivated by educators. Educators play a crucial role in

educating and motivating learners who are disadvantaged by adapting their teaching methodologies and helping learners better understand the curriculum.

As educators develop methodologies in response to the learners they encounter, they must also consider the evolving world around them. Despite facing socio-economic disadvantages, learners in South Africa can succeed with the support and motivation of dedicated educators. This subsection highlights the transformative role of educators in inspiring learners to become passionate about learning and pursue academic excellence. By adopting effective teaching methodologies and fostering positive relationships with learners, educators can empower learners to overcome obstacles, achieve their goals, and build better lives for themselves (De Clercq, 2020; Du Plessis & Mestry, 2019).

Van Dijk, Van Wingen, Denys, Olbrich, Van Ruth and Arns (2022)highlights that educational disadvantage remains a pressing concern in South Africa, with socio-economic barriers and the digital divide significantly affecting learner outcomes. While existing literature identifies these challenges and recommends empowering educators through innovative teaching methodologies, there is limited empirical evidence on how educators in resource-constrained contexts, such as Umlazi, practically adapt their instructional methodologies to address both socio-economic disadvantage and the diverse learning needs of GA learners. This gap underscores the need for research that explores educators lived experiences in implementing differentiated and inclusive pedagogical approaches, providing insight into effective methodologies for mitigating educational inequities in disadvantaged school settings.

.While socio-economic challenges are widely documented, there is limited research examining how pedagogical frameworks such as MI can be used to mitigate their impact within the classroom. This suggests that the issue is not only structural but also pedagogical, requiring educators to adapt their teaching approaches to better support diverse learners despite contextual constraints.

The literature review now examines the impact of the Fourth and Fifth Industrial Revolutions on learners and education, highlighting how technological, economic, and societal changes are reshaping learning environments and the skills required for the modern world.

2.5. THE FOURTH AND FIFTH INDUSTRIAL REVOLUTIONS

The way modern people live and work is changing due to disruptive technologies and trends, including the Internet of Things, robotics, virtual reality, and artificial intelligence (Wigmore, 2023). This is known as the Fourth Industrial Revolution. Industry 4.0 refers to the incorporation of these technologies into production processes (Nkosi, 2025). The fourth revolution has been fuelled by technological advancement, whereas ideals are fuelling the fifth. The rapid advancement of disruptive technologies, reshaping the way people live and work, marks the advent of the Fourth Industrial Revolution. This section of the literature review explores the implications of the Fourth and Fifth Industrial Revolutions on education, highlighting the need for educators to adapt their teaching methodologies to prepare learners for the evolving work environment. The following subsection examines the transformation of industry and the workforce.

2.5.1. Industry 4.0 and Industry 5.0: Transforming production and work

As the world transitions into new industrial paradigms, there is a growing emphasis on transforming educational systems to align with the evolving demands of the future workforce. Industry 4.0, characterised by advances in automation and artificial intelligence, introduced an era of interconnected devices and intelligent manufacturing systems (Nkosi, 2025; Wigmore, 2023). Whereas Industry 4.0 has emphasised efficiency and productivity through technological integration, the emerging paradigm of Industry 5.0 shifts the focus toward human-centric innovation, sustainability, and enhanced collaboration between humans and machines (European Commission, 2021). This evolution presents an important opportunity for education to move away from rigid, traditional models and embrace learner-centred, future-oriented approaches.

In the schooling context, this transition calls for a reimagining of pedagogy through the lens of constructivism—emphasising inquiry, adaptability, and personalised learning environments that address learners' diverse needs (Dede, 2010). As educational institutions recognise the need to equip learners with competencies aligned to future economies, the principles underpinning Industry 4.0 and 5.0 serve as critical drivers of pedagogical innovation. According to Wigmore (2023), whereas Industry 4.0 focused on technological intelligence, Industry 5.0 prioritises the human experience by integrating social and emotional intelligence into intelligent systems. This emphasis mirrors the educational imperative to place learners at the centre of instructional

processes, shifting from educator-directed, fact-based instruction towards models that foster critical thinking, creativity, problem-solving, and digital fluency (Zahidi, 2020). In this sense, the rise of human-machine collaboration in Industry 5.0 becomes a metaphor for effective education, where technology supports, rather than replaces, the human element in teaching and learning.

Educators today face the challenge of integrating adaptive learning systems that leverage technology to enhance individual learning experiences (Dede, 2010). With the increasing adoption of artificial intelligence and machine learning, schools can implement systems that adjust in real-time to the needs, strengths, and learning styles of learners. As Online Educa Berlin ([OEB], 2019) points out, the traditional educator-centred classroom, where learners are expected to memorise information, is no longer effective in a rapidly changing world. Instead, educators must facilitate personalised, technology-enhanced learning environments that develop the skills required for the future workforce, including problem-solving, digital literacy, and collaboration (Wigmore, 2023).

Furthermore, Industry 5.0's emphasis on sustainability aligns with the growing need for schools to promote environmental education and sustainable practices (Schwab, 2016). Schools can leverage cyber-physical systems to create more sustainable learning environments, integrating technology that not only enhances education but also reduces environmental impacts. For example, the use of energy-efficient devices, digital textbooks, and online learning platforms reduces waste while expanding access to educational resources (Dede, 2010).

Governments and policymakers play a pivotal role in this transformation. Investments in digital infrastructure, professional development for educators, and curriculum reforms are essential to prepare schools for the future (Solomon et al., 2018). Schools in under-resourced areas require targeted support to ensure that all learners have equal opportunities to engage with technology and develop the skills necessary for the workforce of tomorrow (Nkosi, 2025).

2.5.2. The implications for education: Moving beyond traditional pedagogies

Education systems are not keeping pace with the world's revolutions (Fernandes, Araujo & Oke, 2020). Educators are often comfortable with techniques they have used in the past, without considering the learners they are teaching (Fernandes et al., 2020).

Moloi and Mhlanga (2021) have argued that educators in South African public schools refuse to adapt their methods to the changes in the world and the learners they have. Although South Africans have been keeping up with technological advancements as much as possible and the education department has been holding workshops on how to adapt to global changes, educators take the methodologies that they use for granted (Moloi & Mhlanga, 2021).

Educators need to have a profound understanding of the world to effectively prepare GA learners because they are entering a rapidly evolving global landscape marked by technological advancements, complex environmental challenges, and interconnected societies (Darling-Hammond & Bransford, 2007).To equip these learners with the skills and knowledge necessary for success, educators must be aware of the current state of the world, including technological trends, cultural shifts, and economic dynamics (Panero, Martínez-Sánchez & Ronzón-Montiel, 2024). This understanding enables educators to tailor their teaching methods, curricula, and learning experiences to foster critical thinking, adaptability, digital literacy, and cross-cultural competence in GA learners, ensuring they are well-equipped to navigate and contribute to an ever-changing world (Schleicher et al.). To effectively prepare GA learners for the rapidly evolving global landscape, educators must have a profound understanding of technological trends, cultural shifts, and economic dynamics (Darling-Hammond & Bransford, 2007). This understanding enables educators to tailor their teaching methods and curricula to foster critical thinking, adaptability, digital literacy, and cross-cultural competence in GA learners (Schuerholz-Lehr, 2007).

The literature demonstrates that the Fourth and Fifth Industrial Revolutions are reshaping the skills, knowledge, and competencies learners require, and emphasises the need for educators to adopt innovative, technology-enhanced teaching methodologies (Carrim, 2022). However, while global and national studies provide guidance on preparing learners for the evolving work context, there is limited research exploring how educators in resource-constrained and socio-economically disadvantaged South African schools, such as those in the Umlazi District, implement these methodologies in practice. This gap underscores the necessity for studies that examine the lived experiences of educators as they navigate technological integration, differentiated instruction, and skills development in contexts characterised by both generational diversity and limited educational resources.

These global shifts further reinforce the relevance of MI, as the development of diverse intelligences aligns with the need for adaptable, creative, and critical thinkers in the modern workforce. This suggests that MI is not only relevant for classroom engagement but also for preparing learners for future societal and economic demands.

The literature review now proceeds to focus on how teaching methodologies need to be adapted to consider the needs of GA learners, the disadvantages in schools, and the Fourth and Fifth Industrial Revolutions.

2.6. ADOPTING MODERN TEACHING AND LEARNING METHODOLOGIES

There are various definitions of teaching methodologies in the literature, as noted by Tennyson and Boutwell (1974), and Zarei, Zarei and Zarei (2024). However, in my study, I align with Killen (2018), who defines teaching methodologies as the methodologies, techniques, and approaches educators employ to facilitate practical learning experiences in the classroom, tailored to learners' needs and characteristics.

2.6.1. The need for modern teaching and learning methodologies

Traditional teaching methods, characterised by rote memorisation and passive learning, are increasingly recognised as inadequate in equipping learners with the skills and competencies necessary for success in today's knowledge-based society (Hirsch, 2020). Scholars such as Mehta (2023) argue that a paradigm shift is required to prioritise understanding, critical thinking, and problem-solving over mere content delivery. This necessitates the adoption of modern teaching methodologies that engage learners actively and promote deep comprehension and application of knowledge. Modern teaching is a style of instruction that emphasises training learners to become more intelligent by applying fresh and creative ideas, rather than forcing them to memorise facts from a syllabus to pass a test (Fullan, 2016).

Mehta (2023) argues that teaching methodologies in Indian classrooms should focus on helping learners understand the subject matter and improve their intellectual behaviour, rather than relying on them to recite the syllabus of subjects to pass an examination without truly understanding the subject matter. This author posits that developing decision-making skills, problem-solving skills, and critical thinking abilities, while adopting teaching methodologies and learning strategies suitable for today's learners, is essential. The next subsection considers engagement and active learning.

2.6.2. Engagement and active learning

It is widely accepted that educators play a crucial role in nurturing learners and building their conceptual understanding of key subject matter that is essential for academic achievement. Research suggests that moving away from educator-centred methodologies—such as the traditional *chalk-and-talk* approach—toward learner-centred methodologies, like inquiry-based learning, can make lesson presentations more effective and engaging (Hmelo-Silver, Duncan & Chinn, 2007). These approaches enable learners to actively investigate topics, collaborate with peers, and develop higher-order thinking skills, thereby reducing disinterest and promoting meaningful learning (Barron & Darling-Hammond, 2008). Although modern learners, including those from GA, demonstrate increasing creativity and technological adaptability, many educators—especially in under-resourced contexts—continue to rely on traditional didactic methods that deliver only surface-level knowledge (Zevenbergen, 2007). This persistence of outdated instructional models may hinder learner motivation and engagement. As Lynch (2017) notes, learner-centric pedagogies are not only more aligned with the cognitive preferences of today's learners but also foster a genuine passion for learning and a sense of autonomy in the classroom.

Educators, as highlighted by Yang, Cai, Yang and Wang (2023), are shifting away from traditional, educator-centred approaches towards learner-centred methods, such as inquiry-based learning and project-based learning. These methodologies empower learners to take ownership of their learning journey, fostering curiosity, creativity, and a passion for lifelong learning. Barron and Darling-Hammond (2008) believe that actively engaging with the subject matter through hands-on activities and collaborative projects enables learners to develop critical thinking skills and gain a deeper understanding of complex concepts.

Westwood (2018) advises that American educators should adopt teaching methodologies that are aligned with learners' needs to promote sustained engagement with lesson content and subject matter Echoing this sentiment, Ray and Chakravarty (2025) assert that educators should adapt their methodologies to ensure learner comprehension, rather than modifying their approaches merely for instructional convenience. The core argument shared by both authors is the necessity of tailoring instructional methodologies to accommodate learners' diverse cognitive and

developmental needs. This view is supported by Tomlinson (2014), who argues that differentiated instruction is key to creating inclusive classrooms where all learners have equitable opportunities to succeed. Similarly, Darling-Hammond, Flook, Cook-Harvey, Barren, & Osher (2020) highlight that learner-centred teaching not only improves engagement but also enhances academic outcomes, particularly in disadvantaged contexts. In today's classrooms, where learners possess varied intelligences, experiences, and backgrounds, a one-size-fits-all approach is inadequate. As noted by Killen (2018), effective educators are those who intentionally match their methods to learners' individual strengths, needs, and learning preferences to foster comprehension, critical thinking, and long-term retention. The next subsection discusses personalised learning and differentiated instruction.

2.6.3. Personalised learning and differentiated instruction

Another hallmark of modern teaching methodologies is the recognition of the diverse learning needs and preferences of learners. Basye (2018) emphasises the importance of personalised learning experiences tailored to individual learners' strengths, interests, and learning styles. Killen (2018), together with Basye (2018), express that educators are employing differentiated instructional methodologies to accommodate these diverse needs, ensuring that every student has access to high-quality education and opportunities for success; by adapting teaching methods to suit the unique characteristics of each learner, educators can maximise student engagement, motivation, and achievement.

Killen (2018) has emphasised that the adoption of diverse teaching methods in the Eastern Cape, South Africa, is essential, as learners learn and understand concepts in different ways. Educators should develop and adopt teaching methods that are centred around learners learning concepts more effectively. An educator should be able to develop a teaching method by observing the learners that they are presently teaching as well as considering what method would be best suited to deliver a lesson where learning takes place. Karami (2022) states that teaching methodologies should be adapted so that learners critical thinking and learning skills are used to maximum capacity to ensure that learning takes place.

In their study of South African GA learners, Ziatdinov and Cilliers (2021) have explained that teaching methodologies must be adapted in education, as "no one cap

fits all" (p. 8). The authors argue that what was suitable for one generation may not be suitable for another. They have explained that GA learners learn best using methodologies that allow them to evaluate different aspects of subject matter, such as cooperative learning, learning by discovery, and inquiry-based learning. The onus is on educators to evolve and innovate in their pedagogical approaches. Generation Alpha learners, characterised by their digital nativism and penchant for interactive learning, require teaching methodologies that foster collaboration, creativity, and critical thinking. The importance of adaptability is discussed in the next subsection.

2.6.4. Understanding the importance of adaptability

The adoption of modern teaching and learning methodologies holds immense promise for transforming education and preparing learners for success in the 21st century (Smith & Cekiso, 2020). By prioritising engagement, active learning, personalised instruction, and technology integration, educators can create vibrant learning environments that inspire curiosity, foster critical thinking, and cultivate lifelong learners (Killen, 2018). Moving forward, educators and policymakers must continue to embrace innovation and explore new approaches to education that meet the evolving needs of learners in an increasingly complex and dynamic world (Basye, 2018).

Across the literature, there is a consistent agreement that traditional, teacher-centred methodologies are no longer sufficient, while learner-centred approaches—such as inquiry-based and differentiated instruction—are more effective in promoting engagement and understanding. However, there is less consensus on how these approaches can be implemented effectively in disadvantaged contexts, highlighting a need for context-specific research.

2.7. CHAPTER SUMMARY AND IMPLICATIONS FOR EMPIRICAL STUDY

This chapter provided a comprehensive overview of the key concepts underpinning this study, with a particular focus on the theoretical and contextual foundations relevant to understanding how educators can enhance classroom learning for GA learners in disadvantaged settings such as in the Umlazi District.

The chapter began by exploring Gardner's Theory of MI, which provides the conceptual backbone of this study. This theory supports the notion that intelligence is not a single, fixed attribute, but rather a range of cognitive capacities, each of which is valuable.

The discussion then transitioned to focus on GA and their alignment with 21st-century learning needs, highlighting their exposure to digital technologies from birth and the subsequent demand for more innovative, flexible, and learner-centred approaches in the classroom.

In connecting these theoretical constructs to the local context, the chapter outlined the importance of adopting modern teaching and learning methodologies that prioritise engagement, active learning, personalisation, and adaptability—principles essential for meeting the learning needs of GA. The value of understanding generational dynamics in education was also emphasised, particularly in identifying how learner characteristics have evolved from previous generations to those of today's learners, and what implications these shifts have for teaching methodologies.

A significant portion of the chapter was devoted to examining the challenges of disadvantage in South African education, including the digital divide and socio-economic barriers that often hinder equitable learning opportunities. These challenges necessitate the development of innovative, inclusive practices to ensure that no learner is left behind. Furthermore, the chapter examined how the Fourth and Fifth Industrial Revolutions are reshaping the educational landscape, advocating for a shift away from traditional pedagogies towards more collaborative, human-centred, and technology-integrated approaches.

By weaving together these themes, namely MI, GA characteristics, modern methodologies, generational learning differences, educational disadvantage, and the evolving industrial context, this chapter sets the theoretical and contextual stage for the study. It highlighted the critical role educators play in bridging theory and practice to foster inclusive, engaging, and responsive learning environments. My study identified a primary gap in the existing literature, namely the limited exploration of how educators in disadvantaged South African schools apply teaching methodologies that respond to diverse learner needs. Furthermore, it systematically guided the methodological approach, thereby ensuring a rigorous research process.

The next chapter discusses the research methodology employed in this study. It outlines the research design, paradigm, data generation methodologies, and analytical methods used to explore the lived experiences of educators teaching GA learners in disadvantaged Umlazi classrooms.

CHAPTER THREE: RESEARCH DESIGN AND METHODS

3.1. INTRODUCTION

Chapter Two presented a comprehensive literature review that supports this study within the relevant theoretical framework and pedagogical practices. The review focused on key concepts, including Howard Gardner's (1983) Theory of Multiple Intelligences (MI), Generation Alpha (GA) learners, contemporary teaching methodologies, educational disadvantage in South Africa, and the implications of the Fourth and Fifth Industrial Revolutions on classroom implementation. These concepts have provided the theoretical and practical foundation for understanding the changing learning needs of GA learners and how educators address these needs through innovative and responsive teaching methodologies.

This chapter discusses the research methodology used to explore how Grade Seven educators in the Umlazi District incorporate MI within their teaching methodologies to facilitate appropriate learning among disadvantaged GA learners. Research methodology is a plan of action that addresses the research approach (Lichtman, 2023). The study follows an exploratory approach, suitable for obtaining an understanding of the teaching methodologies applied in classroom settings.

The chapter opens with an explanation of the importance of the research design, paradigm, and qualitative approach in this study. Additionally, it describes the reasons why those components were chosen to suit the nature and aims of the study. The study's context, sampling methodologies, and sample size are outlined, followed by a comprehensive discussion of the data generation methods employed, including semi-structured open-ended interviews and classroom observations.

Furthermore, this chapter presents the study methodology, including analysis methods and procedures used in data handling and interpretation. It also discusses trustworthiness in qualitative research, focusing on credibility, transferability, dependability, and confirmability. Finally, the chapter concludes with a discussion of ethical aspects, including the permission granted by relevant authorities (e.g., the Department of Basic Education), consent from participants, and the confidentiality and anonymity of the research. In the first part of the chapter, the rationale for the empirical research is discussed.

3.2. RATIONALE FOR EMPIRICAL RESEARCH

According to Janssen (2023), research design is the plan or strategy that logically and systematically integrates the elements of a study, guiding the processes of data collection, measurement, and analysis to produce precise, reliable, and evidence-based answers to the research questions. This research is a qualitative study with an exploratory nature. It is especially appropriate to use exploratory research when the subject matter is less well-known or understood and requires exploration (Lichtman, 2023). Considering that there is limited information on how Grade Seven educators in the Umlazi District modify teaching methodologies by implementing Gardner's Theory of MI to cater to GA learners, this method was found suitable. As an educator, I recognised the lack of knowledge about how educators make sense of and adapt their teaching in relation to the variety of learning styles in disadvantaged school settings.

The exploratory design enabled an unstructured examination of educators' experiences, beliefs, and classroom adjustments. This flexibility enabled in-depth probing through semi-structured open-ended interviews and classroom observations, enabling the gathering of raw, rich data grounded in teaching practice. A range of learner-oriented factors, including individual intelligences and learning preferences, as well as context-related limitations, influenced how educators made pedagogical decisions, which were only accessible through a qualitative research methodology.

Qualitative methods, namely those that are inductive and have their origin in social inquiry, are particularly effective in cases where one seeks to gain an understanding of complex social contexts and the meaning structures through which people make sense of and construct reality (Creswell & Poth, 2018). Additionally, as Smith (2019) notes, qualitative research provides insights into the cultural and social contexts that shape human behaviour, which is particularly relevant to the teaching decisions of educators in the Umlazi District. Although qualitative research can be time-consuming, effective time management and planning, including interviews and observations, enabled a balance between the demands of the research and professional responsibilities.

The primary reason for using this design was to gather educators' opinions on the integration of MI theory in teaching, the learners' reactions to various teaching methodologies and modes, and the challenges faced in under-resourced schools. This

method provided in-depth, rich data that could not be obtained quantitatively, which in turn contributes to a more comprehensive understanding of the complexities of poverty education.

Thus, the exploratory qualitative design was suitable for understanding how Grade Seven educators navigate teaching in a culturally diverse, underserved, and changing educational landscape. It was highly congruent with the study's purposes and provided helpful information to inform future pedagogical approaches and syllabus planning. The next section covers the research design, including the research paradigm, approach, and strategy.

3.3. RESEARCH DESIGN

According to Jansen (2019), a research design is a plan that systematically guides the processes of data collection and analysis to address the research questions. This study adopted an exploratory research design, which is appropriate when a topic is not widely understood and requires in-depth investigation (Lichtman, 2023).

The design was considered suitable because limited research exists on how Grade Seven educators in the Umlazi District adapt their teaching methodologies using Gardner's Theory of MI to support GA learners. The exploratory design therefore enabled an in-depth examination of educators' experiences, classroom practices, and pedagogical adaptations within under-resourced school contexts.

It provided the flexibility needed to explore how educators interpret and respond to diverse learner needs, including differences in intelligences, learning preferences, and contextual challenges. This approach enabled the study to generate rich insights into how teaching practices are shaped within real classroom environments.

Overall, the exploratory research design was appropriate for gaining a deeper understanding of how educators navigate teaching in a diverse and changing educational landscape. The subsection that follows discusses the research paradigm guiding the study.

3.3.1. Research paradigm

A research paradigm is represented by the philosophical foundation that underpins a study, influencing how a researcher conceptualises, conducts, and interprets the research (Mirea, 2024). Broadly, research paradigms are often categorised into

positivism, which emphasises objectivity and prediction, and anti-positivism, which seeks to understand the subjective meanings behind human behaviour (Mirea, 2024). Within the anti-positivist tradition lies interpretivism, also known as constructivism.

This study embraced the interpretivist paradigm to explore how Grade Seven educators in Umlazi primary schools perceive and apply teaching methodologies aligned with Gardner's MI theory to support GA learners. Brought into perspective in Chapter One, this paradigm is appropriate because it focuses on understanding the lived experiences, social contexts, and meaning-making processes of individuals, specifically in this study, the educators. Interpretivism views reality as socially constructed and shaped by interaction (Ulz, 2023). The interpretivist approach was well-suited, as it could be used to examine the harrowing experiences of educators working in disadvantaged settings.

The philosophical foundation of this paradigm aligns with Vygotsky's (1978) Social Constructivist Theory, which asserts that learning is most effective within social interactions, particularly between learners and more knowledgeable others. Within the context of this study, Vygotsky's ideas informed the recognition that collaborative teaching, peer learning, and attention to the Zone of Proximal Development are crucial for fostering the growth of GA learners, particularly in theoretical subjects.

The suggestion of the interpretivist paradigm was further explained by Kivunja and Kuyini (2017). As stated in Section 3.6, this study placed a high priority on ethical involvement, respect, and trust, acknowledging that the values of both the researcher and the participants have an impact on the research process. Interpretivism adopts a subjective worldview on an ontological level, acknowledging that each educator's cultural background, educational setting, and experiences shape different realities. Instead of seeking a single objective truth, the study valued diverse perspectives on adapting teaching methods for GA learners. Epistemologically, knowledge was understood as co-constructed through interaction, with insights drawn from educators' reflections on tailoring instruction to varied intelligence profiles in disadvantaged contexts. Methodologically, this paradigm supported the use of a qualitative exploratory design, employing semi-structured open-ended interviews and classroom observations to gather rich, contextually grounded data.

The interpretivist paradigm enabled a deep immersion into the real-world experiences of Umlazi primary school educators, facilitating a meaningful interpretation of their efforts to implement learner-centred methodologies responsive to the unique learning needs of the learners. This approach shed light on educators' perspectives, challenges, and methods, contributing to a nuanced understanding of effective teaching in disadvantaged educational settings. The next subsection discusses the research approach used.

3.3.2. Research approach

This research used a qualitative research approach. Qualitative research is employed to understand and interpret the meanings that individuals and groups attribute to social and human issues (Creswell, 2007). It attempts to reflect real-life experiences and interactions (Tomaszewski, Zarestky & Gonzalez, 2020). This strategy is critical in educational research, as it enables an in-depth analysis of complex phenomena (Olmo-Extremera, Fernández-Terol & Montes, 2024). As the purpose of the study was to determine how teaching methodologies were explored among Grade Seven learners in disadvantaged circumstances by educators in the Umlazi District (in this case), a qualitative approach was most appropriate.

Complementing this method, the current study used inductive logic, developing patterns and themes directly from the data as opposed to testing a priori hypotheses (Lichtman, 2023). This enabled the development of a detailed, grounded understanding of educators' activities and experiences on their own terms, with insights that emerged organically during the data generation and analysis process. The characteristics of the qualitative approach, as outlined by Creswell (2007), are presented in Table 3.1 and were aligned with how this research was conducted.

Table 3.1: An outline of the relevance of a qualitative research approach in this study (own design based on Creswell, 2007)

Characteristics of the Qualitative Approach	**Application in This Study**
Data from a source in its context	Data were collected directly from educators through interviews and classroom observations, capturing their

	real-world teaching experiences with disadvantaged learners.
Participants' perspectives	The research focused on the thoughts, experiences, and interpretations of educators regarding the effectiveness of teaching methodologies in enhancing learner engagement and achievement.
Theoretical context	Gardner's (1983) MI framework was used to explore learner-centred pedagogy.
I am the primary instrument	I personally conducted interviews and observations, ensuring the collection of rich, contextualised data.
Interpretive nature	The study relied on how the educators and I interpreted what was said, observed, and understood in the classroom environment.
Variety of data sources	Interviews and direct observations were used as complementary data generation tools to enhance the credibility of the findings.

Quantitative and mixed-method approaches were considered but were not appropriate for this study. A positivist perspective, typically used in the natural sciences to measure variables (Ngari, Stephen & Kilka, 2018), would not have allowed for an in-depth understanding of educators lived experiences. Mixed methods research, which includes both quantitative and qualitative components (Cai & Kosaka, 2019), was also not necessary, as this study primarily aimed to understand teaching practices rather than measure or statistically analyse them.

The following subsection presents the research type that guided the practical implementation of the qualitative approach.

3.3.3. Research strategy

As discussed in Chapter One, a multiple case study strategy was chosen as the most appropriate form of qualitative research for this study. A multiple case study emphasises an intensive analysis of a multiple case, using all available data to describe that case in detail (Tomaszewski, Klinger & Pugliese, 2022; Yin, 2014). This strategy supports an in-depth exploration of the case phenomena in their naturalistic contexts as well as of the participants themselves.

This MI research was conducted within naturalistic contexts and focused on the perspectives of the participants themselves. A multiple case study design was adopted, enabling the examination of several units of study and supporting cross-case comparison. This design was appropriate for exploring educators' teaching practices and how these practices respond to the needs of disadvantaged GA learners.

Yin (2014) emphasises that a set of case studies enhances the reliability of results by incorporating diverse perspectives and contexts. The information gathered in this study provided an understanding of common trends, difficulties, struggles, as well as best practices in teaching methodologies in disadvantaged educational settings.

Other qualitative methods, such as grounded theory, ethnography, phenomenology, and narrative research were considered less appropriate. Grounded theory typically aims to generate new theories, whereas ethnography focuses on cultural practices, and phenomenology provides an account of individual experiences related to a given phenomenon (Creswell & Poth, 2018). For its part, multiple case study design research constitutes a suitable approach to understanding the *how* and the *why* of teaching in actual classroom situations and may afford a rich perspective on educators' problems and solutions vis-à-vis learners from disadvantaged backgrounds.

The use of a case study strategy was appropriate for this study as it enabled an in-depth exploration of educators' experiences within their real-life classroom contexts.

Case study research is particularly useful when the focus is on understanding complex social phenomena within specific settings, allowing for rich, detailed insights rather than broad generalisations (Yin, 2018; Merriam, 2009).

The selection of 12 Grade Seven educators across six schools was considered sufficient for this qualitative study, as the focus was on depth rather than breadth. The sample size allowed for the generation of rich, detailed data while still being manageable for in-depth analysis. Data saturation was reached as recurring themes and patterns emerged across participants, indicating that additional data collection was unlikely to yield significantly new insights (Guest, Arwen Bunce & Johnson, 2006).

Case studies enable the development of a deeper, contextualised understanding of complex phenomena that experimental designs of cause-and-effect would not capture, owing to an exaggerated adherence to cause-and-effect relationships without consideration of underlying factors (Yin, 2014). However, multiple case study research, as Yin (2014) emphasises that case study research must be carefully planned and structured, rather than based on issues that arise randomly, to minimise bias and ensure rigour and it is important for researchers to ensure the data are presented honestly and transparently to maintain the face validity of the study. The next section discusses the research methods used.

3.4. RESEARCH METHODS

This section introduces the key components of the research methodology applied in this study. It describes the target population, sampling strategy, data generation methods, and the data analysis process Each subsection provides a description of how these elements guided the execution of the study.

3.4.1. Selection of participants

Twelve primary school educators from six schools in the Umlazi District were selected. The study employed purposive sampling to recruit participants who could provide rich, detailed information about the phenomenon in question (Adom, Yeboah & Ankrah, 2016). This sampling method is based on subjectivity and researcher discretion, where specific criteria are used to screen eligible participants according to the study's aim (Lichtman, 2023).

In this study, educators teaching different Grade Seven subjects were purposefully selected to explore the range of methodologies employed across the curriculum. This approach allowed for the examination of how instructional methodologies vary according to subject-specific requirements and how educators adapt their teaching to meet the diverse learning needs of their students. By including multiple subjects, the

study captures a more comprehensive understanding of classroom practices and the ways in which teaching methods are tailored to optimise learning outcomes. A sample size of 12 educators from six schools was sufficient to investigate a wide range of teaching experiences, including teaching methods used and struggles that educators encountered. As the study focused on how Grade Seven educators explore teaching methodologies to facilitate learning for disadvantaged GA learners in Umlazi, it was necessary to use purposive sampling to make valid and reliable inferences. Such a process ensured that educators with practical knowledge of disadvantaged learners were selected, and that the information gathered was meaningful and appropriate for answering the research questions (Omona, 2013).

Participants were purposefully selected based on specific inclusion criteria: they were Grade Seven educators teaching in disadvantaged Umlazi schools, willing to participate in interviews and classroom observations, and experienced in working with diverse learners, including GAs. School principals facilitated recruitment by granting permission and introducing me to eligible educators. Establishing these relationships was essential for gaining access to the school context, ensuring trust, and identifying participants who could provide rich, relevant insights into classroom teaching practices. The information about the participants is presented in the next subsection.

3.4.2. General participant information

Chapter Three (Section 3.4.1.) outlined how 12 Grade Seven educators participated in the research through semi-structured open-ended interviews and classroom observations. Background information, including gender, educator qualifications, years of teaching experience, and subjects taught, was collected to provide context for the educators' responses and their teaching practices. Table 3.2 presents the demographic characteristics of the participants involved in the study.

Table 3.2: Demographic characteristics of the participants involved in the study (own design)

Participant Pseudonym	Gender	Age	Teaching Experience (Years)	Qualifications	Grade Taught	Subjects Taught
Participant A	Female	41	15	BEd; Honours in Education	Grade 7	EMS, Life Orientation
Participant B	Female	38	13	BEd Senior & FET Phase	Grade 7	Natural Science, Creative Arts
Participant C	Female	45	20	Diploma in Education; BEd Upgrade	Grade 7	English, Social Science
Participant D	Female	36	10	BEd; ACE in Inclusive Education	Grade 7	EMS, History
Participant E	Male	34	9	BEd Senior Phase; PGCE	Grade 7	Mathematics, Life Orientation
Participant F	Female	40	17	BEd; Honours in Curriculum Studies	Grade 7	Creative Arts, Social Science
Participant G	Female	29	6	BEd Senior Phase	Grade 7	Natural Science, EMS
Participant H	Female	44	21	BEd; Honours in Educational Leadership	Grade 7	Mathematics, English
Participant I	Female	37	12	BEd; ACE in Mathematics	Grade 7	Mathematics, Natural Science

Participant J	Female	33	8	BEd Foundation to Senior Phase	Grade 7	EMS, Creative Arts
Participant K	Female	46	22	Diploma in Education; ACE in Inclusive Ed.	Grade 7	English, Life Orientation
Participant L	Female	35	11	BEd; Honours	Grade 7	Social Science, Natural Science

The participants were 12 Grade Seven educators from six purposively selected schools who had first-hand teaching experience with GA learners and were utilising diverse teaching methods aligned with Gardner's Theory of MI. Six schools were specifically selected to provide a manageable yet representative sample of the Umlazi District's disadvantaged primary school context. This number allowed for in-depth exploration of classroom practices while ensuring sufficient diversity in teaching environments, learner demographics, and subject offerings to capture a comprehensive understanding of educators' methodologies. Selecting six schools also facilitated practical data collection, including interviews and classroom observations, while maintaining quality and depth of analysis.

For ethical reasons, the participants in this study were anonymised by using aliases to avoid their identification by name. These educators were selected because of their current involvement in the classroom and their understanding of how to modify teaching techniques to address the needs of all learners. The following subsections describe the participants.

3.4.2.1. Age

Participants were aged 29 to 46, representing a diverse range of professional and educational experiences. This age difference brought fresh perspectives on how educators across generations adopt teaching methodologies to engage GA learners.

3.4.2.2. Gender

The study included only one male participant; all other participants were female. This reflects the gender composition of Grade Seven educators in the Umlazi District, where the teaching workforce is predominantly female. This distribution is representative of the actual demographic context and does not affect the study's ability to explore the instructional practices and experiences of educators working with GA learners in disadvantaged primary schools. This is because the study did not aim to draw comparisons based on gender; rather, participants' experiences—regardless of gender—provided valuable and relevant insights into classroom practices and the implementation of differentiated teaching approaches that consider learners' multiple intelligence.

3.4.2.3. Teaching experience

Participants' length of teaching experience ranged from six to 22 years. This variation enabled the study to capture insights from both relatively newer and more experienced educators. All participants had sufficient classroom experience to offer informed reflections on the learning needs of GA learners and how these needs are addressed through differentiated instruction and the application of Gardner's MI theory.

3.4.2.4. Qualification

The participants held diverse qualifications, including Diplomas in Education; BEd degrees; Honours degrees in Education, Curriculum Studies, and Educational Leadership; as well as Advanced Certificates in Education (ACE) and Postgraduate Certificates in Education (PGCE) These varied academic backgrounds enriched the findings, as participants approached classroom teaching from multiple perspectives rooted in both theory and practice.

3.4.2.5. Grade and subject taught

All participants taught Grade Seven learners, collectively covering a broad range of subjects, including English, EMS, Life Orientation, History, Natural Science, Creative Arts, Social Science, and Mathematics. This subject diversity provided a comprehensive understanding of how MI are activated across different learning areas and classroom contexts. The collection of data is discussed in the next subsection.

3.4.3. Data generation

Merriam and Tisdell (2016) describe qualitative data generation as an inductive methodological strategy that enables the reporting of a deep understanding of social systems, focusing on the subjective experiences and contexts of participants. It involves the gathering and interpretation of non-quantifiable data, using the words of participants to discover patterns and themes in the data in relation to the research context (Merriam & Tisdell, 2016). There are various methods for gathering data in qualitative research, including interviews and observations (Smith & Smith, 2018). In my research, two data generation techniques were employed: semi-structured open-ended interviews and direct observations.

3.4.3.1. Semi-structured open-ended interviews

Interviews are a key tool in qualitative research, providing in-depth access to participants lived experiences, thoughts, and perceptions (Cohen, 2011). In this study, semi-structured open-ended interviews (see Appendices E and F) were conducted with educators to explore how they experienced, perceived, and applied teaching methodologies with GA learners in disadvantaged classrooms. This format allowed participants the flexibility to elaborate on their practices while enabling me to probe for deeper understanding where necessary (Patton, 2022).

Building a professional and comfortable relationship with participants during interviews was essential for fostering openness and trust, particularly following the classroom observation stage, which formed the initial phase of data generation. All interviews were audio-recorded and transcribed verbatim to ensure accuracy and reliability.

To maintain the rigour and trustworthiness of the data, Braun and Clarke's (2006) thematic analysis framework was applied, and Lincoln and Guba's (1985) criteria for qualitative trustworthiness guided the analytic process. This ensured that participants' narratives were represented authentically and that the insights generated reflected the nuanced ways in which educators adapt their teaching methodologies to meet the needs of disadvantaged GA learners.

3.4.3.2. Observations

Observation is a data-gathering technique that systematically involves examining an action, event, or process under natural conditions (Smith & Cekiso, 2020). According to Beauchamp et al. (2022), this tool is used to gather firsthand information and insights

by observing the subjects in their natural setting once again, which makes it possible to develop an understanding of the subjects' interactions, behaviours, and processes that do not depend on self-reports from the participants. Observation served as an invaluable data-generating method for my study of teaching methods in Umlazi, KwaZulu-Natal (KZN) primary schools.

By directly immersing myself in actual classroom learning environments, I was able to observe firsthand the teaching methodologies used by the educators. This approach enabled me to observe the real-time application of pedagogical practices (Angrosino, 2007), including classroom management strategies and methods to engage learners. Observation captured the total picture of the teaching and learning process, including the non-verbal cues, educator-learner interaction(s), and the atmosphere in the classroom (Angrosino, 2007). It also helped me isolate patterns, variations, and contextual digressions that influence the effectiveness of one teaching method or another. Observation enabled me to be part of the educational encounters, allowing me to gain insight into the lives of educators and learners, thus providing a fuller picture of Grade Seven teaching and learning in Umlazi, KZN, primary schools.

Observation schedules (See Appendix G) were used to ensure consistency in recording all data. These schedules targeted different types of instructional methods and how each influenced the learners, according to the framework of Cohen et al., (2011). Through the inclusion of Gardner's Theory of MI as a theoretical framework in the research setting, the observation schedules enabled me to acknowledge how various educators' methodologies addressed various kinds of intelligences, for example, linguistic intelligence, logical-mathematical intelligence, spatial intelligence, and interpersonal intelligence, among others. This model helped to explain how adapted instruction can address differences in the learning of educationally disadvantaged learners to improve their school attainment (Gardner, 1983). Direct observations provided a unique, context-rich perspective on the actual educational processes and their effectiveness in promoting inclusive education in real-life settings (Lichtman, 2023).

The data generation methods were closely aligned with the research questions of the study. Semi-structured interviews were used to explore the teaching strategies used by educators, the challenges they experience, and the support they receive, thereby

addressing all three research sub-questions. Classroom observations were conducted to complement the interview data by providing direct insight into how MI-informed teaching practices were implemented in real classroom settings.

This combination of methods ensured that the study captured both reported experiences and actual classroom practices, strengthening the credibility and depth of the findings.

The next subsection presents the data analysis process.

3.4.4. Data analysis

Researchers employ various methods, such as thematic analysis, grounded theory, and content analysis, to identify patterns, themes, and meanings in qualitative data (Miles, Huberman & Saldaña, 2014).

To address the main aim of the study and respond to the central research question concerning how Grade Seven educators employ teaching methodologies to accommodate the MI of GA learners, data were collected in two sequential phases. Semi-structured open-ended interviews were conducted first to explore educators' perceptions, experiences, and reported classroom practices. This was followed by classroom observations, which provided contextual insight into how these teaching methodologies were enacted in practice within disadvantaged primary school settings.

Thematic analysis was employed to analyse data from both the interviews and the classroom observations. The observational data were used to enrich and substantiate the interview findings, thereby strengthening the depth of interpretation and enabling data triangulation. This approach enhanced the credibility of the findings by allowing for a more comprehensive understanding of educators' teaching methodologies and classroom practices in relation to GA learners.

According to Zarei, Zarei and Zarei (2024), direct observation records interactions and behaviours between educators and learners in actual classrooms, providing an account of the processes of teaching and learning. During the observational thematic analysis conducted in this study, the interview recordings and observational field notes were transcribed verbatim by the researcher (see Appendix H). Following transcription, the data were systematically coded to identify and document significant patterns and

emerging themes relevant to the study's research question. Reflexivity was also retained to strengthen the trustworthiness of the analysis (Haynes, 2012).

Gardner's MI framework influenced the coding process in this study, as the central aim was to explore how educators employ teaching methodologies to accommodate the diverse intelligences of GA learners. Gardner's MI theory provided a conceptual lens through which educators' descriptions of their teaching practices and classroom observations could be systematically interpreted (Gardner, 1983; 2011).

During the coding process, the data were examined for evidence of instructional strategies aligned with the various intelligences identified by Gardner, including linguistic, logical–mathematical, spatial, bodily-kinaesthetic, musical, interpersonal, intrapersonal, and naturalistic intelligences (Gardner, 1983). The framework guided the organisation of codes by enabling the researcher to categorise teaching practices according to the types of intelligences they supported, while remaining open to additional patterns emerging inductively from the data. In this way, the MI framework supported a theoretically informed yet flexible approach to thematic analysis, ensuring alignment with the study's research question without constraining the emergence of new insights (Braun & Clarke, 2006).

Thematic analysis (Braun & Clarke, 2006) described how instruction in the Grade Seven classrooms was implemented in terms of Gardner's MI framework using data obtained from semi-structured open-ended interviews and observations of direct instruction. The steps in the thematic analysis process were as follows:

Step one: Data familiarisation—Data analysis began with the simultaneous engagement of data generated from semi-structured interview transcripts and direct classroom observation field notes. These two data sources were treated as complementary, with interviews capturing educators' articulated perceptions and experiences of MI and observations documenting the enactment of teaching methodologies during classroom activities. I read the interview transcripts multiple times to gain insight into initial patterns, diverse viewpoints, and educators' experiences and understandings of MI, as well as their opinions regarding its use in practice.

I thereafter engaged in an iterative process of reading and re-reading both the interview transcripts and the corresponding classroom observation notes, moving back and forth

between the two data sets to construct meaning (Miles et al., 2014). Attention was paid to observed teaching activities and educators' explanations of these practices in relation to Gardner's intelligences.

An Excel spreadsheet was used to organise the data, with interview responses and observation excerpts pasted into corresponding sections and clearly linked to their raw data sources through consistent referencing and formatting. This process ensured that patterns and emerging codes were grounded in both what educators reported during interviews and what was observed in classroom practice, thereby maintaining a strong connection between the analysis and the original data.

Step Two: Generating initial codes—To code thematically, the raw data were organised in MS Excel and then coded and developed into themes in MS Word. Each row of the spreadsheet contained data belonging to a particular participant or observation session, and each column represented a different type of data (e.g., participant ID, question responses, observed teaching strategy, and notes on learner engagement). Specific wording that appeared frequently or was important for teaching methods and challenges was highlighted to support the identification of initial patterns.

The organised data were transferred into a single MS Word document and formatted for annotation. In MS Word, I engaged in line-by-line coding by identifying key words, terms, and recurrent themes described in the participants' responses. Descriptive codes were assigned, consistent with the meaning of the statements. Codes relating to teaching practices were linked to themes such as direct and differentiated teaching methodologies; collaborative and problem-based teaching methodologies; and creative, visual, and technological teaching methodologies. Codes relating to classroom realities were linked to learner disengagement and classroom management, resource limitations, and heavy workloads. Codes relating to professional support were linked to gaps in pedagogical training, limited professional development in STEM and language instruction, and the need for professional development in MI training.

Following the initial coding, I created an MS Word table that included all the identified categories and grouped them under broader themes emerging from the data. I then re-read the codes to remove redundancies, refine wording, and ensure alignment with the study's goals.

Step Three: Searching for themes—To generate themes, I followed a systematic approach that progressed from initial coding to more abstract patterns. Codes were examined for relationships and grouped into broader categories representing the most significant features of teaching practices and contextual challenges in disadvantaged classrooms. Categories were refined according to their relevance to the research sub-questions. Some were combined to avoid repetition, while others were divided into sub-themes to provide greater specificity and clarity. Themes were cross-referenced with interview transcripts and observation notes to ensure they were grounded in participants' experiences and classroom realities.

Step Four: Reviewing themes—Following the identification of the initial themes, a thorough review was conducted to ensure their integrity and coherence in relation to the research focus. This involved returning to the coded data and verifying whether each theme was grounded in participants' responses and classroom observations. Themes supported by limited evidence were reconsidered, merged with related themes, or discarded where necessary. I also reviewed the themes for homogeneity, overlap, and redundancy (Braun & Clarke, 2006).

Step Five: Defining and naming themes—Once the reviewed themes had been established, defining and naming them began to capture the central meaning conveyed by the data. Each theme was given a clear and descriptive label based on recurring patterns in the data. The themes reflected educators' teaching practices, classroom challenges, and professional development needs in relation to accommodating the MI of GA learners. Sub-themes were refined where necessary to provide clarity and represent variations in practice across different classroom contexts.

Step Six: Writing a report—The final themes were organised into a structured framework representing the main findings of the study. The presentation of the findings that emerged from the participant interviews and classroom observations is reported in Chapter Four of this dissertation, where the data are systematically examined and interpreted in relation to the research questions.

3.5. TRUSTWORTHINESS

According to Lincoln and Guba (1985), the trustworthiness of qualitative research is guided and determined by four main criteria: credibility, transferability, dependability, and confirmability. Adherence to these criteria ensures that the findings of a qualitative

study are accurate, applicable, consistent, and neutral. In this study, I adhered to Lincoln and Guba's (1985) framework to establish the trustworthiness of the research process and outcomes.

3.5.1. Credibility

Credibility refers to the match between the results of research and the participants' truths (Lincoln & Guba, 1985). To strengthen the trustworthiness of my inquiry, I employed multiple data sources and methods, specifically semi-structured open-ended interviews and classroom observations. This approach enabled the interrogation of data from multiple perspectives to address potential discrepancies, biases, or oversights in the data (Adler, 2022). Combining interview and observation data provided a deeper and more authentic exploration of teaching methodologies used by Grade Seven educators in disadvantaged settings. The use of more than one instrument therefore enhanced the trustworthiness and confidence of the study's findings by capturing classroom discourse and teaching practices from multiple angles.

In addition, member checking was conducted by sharing preliminary findings with participants to validate and corroborate the accuracy of the data and interpretations. This process allowed participants to confirm that their views and experiences were represented faithfully, thereby strengthening the credibility of the study.

3.5.2. Transferability

Transferability in my study refers to the degree to which insights into educators' experiences in MI with GA learners are relevant to other educational contexts (Al-Sheikh Hassan, 2025). In addition, to support transferability, detailed descriptions of the Umlazi District school context, as well as the socio-economic contexts of learners, participants, data generation procedures, and timeframes have been documented. In providing these thick descriptions, the study offers educators, policymakers, and researchers working in similar disadvantaged South African school contexts an opportunity to consider the relevance of the findings to their specific settings. This contextual richness further enabled me to understand how teaching methodologies aligned with MI can be modified for use in other disadvantaged classrooms, thereby increasing the external validity and generalisability of the study (Lincoln & Guba, 1985).

3.5.3. Dependability

Dependability pertains to the reliability and consistency of the research process throughout time (Lincoln & Guba, 1985). In this study, peer debriefing and peer evaluation were employed to enhance reliability. Debriefing colleagues included organised talks with my supervisor and other colleagues, all of whom understood the study's educational context. Moreover, through peer review, unprocessed data sets were distributed for independent examination. This supported vital outside assessment of the interpretations and ensured that the analytical process remained precise and methodical throughout.

3.5.4. Confirmability

Confirmability refers to the extent to which research findings are shaped by the participants' responses rather than by researcher bias or personal motivations (Lincoln & Guba, 1985). To maintain confirmability in this study, I ensured a strong relationship with aspects such as objectivity, accuracy, and transparency when collecting the data. I ensured that the data cross-check and analysis procedures were maintained, and interpretations were continually cross-checked with the raw data to avoid misrepresentation. The ethical measures taken during this study are discussed in the next section.

3.6. ETHICAL MEASURES

Ethical issues are crucial for qualitative research, especially when it involves human subjects. According to Bhandari (2019), ethical considerations are a set of principles that ensure integrity in the conduct and execution of research. These principles exist to protect the rights, dignity, and well-being of participants while maintaining the trustworthiness and transparency of the research process (Resnik, 2020). Consequently, ethical precautions were taken during this study to safeguard all participants involved.

3.6.1. Approval for the research

As described in Chapter One (Section 1.8), ethical clearance was obtained from the University of South Africa's (UNISA) College of Education Research Ethics Committee (see Appendix A). In addition, permission to conduct research in schools was sought and granted by the Umlazi District of the KZN Department of Education (see Appendix

B). These approvals allowed me to proceed with interviews and observations at the identified schools.

3.6.2. Informed consent

Before data collection began, all participating educators were provided with clear, comprehensive information about the study's purpose, objectives, procedures, and potential benefits (See Appendix C). As recommended by Walker (2007), participants were informed that their involvement was entirely voluntary and that they had the right to withdraw from the study at any stage without any negative consequences. Those who agreed to participate signed informed consent forms, thereby confirming their understanding and willingness to participate in the research (See Appendix D).

3.6.3. Privacy and confidentiality

All educators who participated received assurances that their personal identities would be kept private. All reports and transcripts used pseudonyms rather than their real names. There were 12 participants in total, referred to as P1, P2, P3, … P12, for participants one to 12. Password-protected files, which contained information gleaned from observations and interviews, were accessible only to my supervisor and I. Additionally, every interview was scheduled in a private setting, allowing participants to speak freely without outside influence. All data were handled with the utmost confidentiality to protect participant anonymity and privacy, in line with ethical research standards in South Africa (Maree, 2016; National Department of Health [NDOH], 2024).

3.6.4. Risk concerns

This study posed minimal to no risk to the participating educators. However, it was acknowledged that the research might cause minor inconvenience due to time commitments required for interviews and observations. To avoid this, interviews were scheduled at times convenient for the participants. In the unforeseen event that any participant experienced emotional discomfort when expressing their views, support resources such as Lifeline Durban, a local non-profit counselling organisation, were made available. In more serious cases, participants would have been referred to the King Dinuzulu Hospital for professional support (NDOH, 2024).

3.6.5. Debriefing

After completion of data analysis and interpretation, a debriefing process was conducted, a debriefing process was conducted with all participants, as recommended by South African research ethics guidelines (NDOH, 2024). During this phase, I provided a summary of the research findings, expressed appreciation for their valuable contributions, and clarified how their input informed the broader understanding of effective teaching methodologies for GA learners. Participant debriefing is considered an essential ethical practice in qualitative research, as it promotes transparency and ensures participants feel valued for their role in knowledge production (Creswell & Creswell, 2017; Merriam & Tisdell, 2016). I also remained mindful of participants' emotional well-being throughout the research process, maintaining a professional and supportive stance during all interactions, in line with ethical research protocols outlined by the NDOH (2024).

3.7. CHAPTER SUMMARY

This chapter outlined the procedures and methods used for data collection. It described the study's research methodology. An explanation was provided for why this study is qualitative in nature. The application of the research design was thoroughly explained, and the justifications were provided in detail. The strengths and weaknesses of qualitative research methodology were highlighted. A detailed explanation of how the data were generated and analysed was outlined in this chapter. An indication of the ethical procedures that were adhered to was also provided. Chapter Four presents the results of the study and a discussion of these findings.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

4.1. INTRODUCTION

This chapter presents and discusses the findings derived from the qualitative data collection process described in Chapter Three, drawing on semi-structured interviews and classroom observations to explore how educators utilise teaching methodologies to address the multiple intelligences of Generation Alpha (GA) learners. Data generated from these sources were analysed simultaneously using a thematic analysis approach, guided by Gardner's (1983) Theory of Multiple Intelligences (MI) as the study's theoretical framework.

The research process involved engagement with educators in their natural classroom contexts within the Umlazi District, KwaZulu-Natal (KZN). Data collection proceeded largely as planned, with participants demonstrating a willingness to share their experiences and classroom practices. Interviews provided opportunities for reflection, while classroom observations offered insight into how teaching methodologies were implemented in practice. Some challenges were encountered by both the researcher and participating educators, including time constraints, demanding school schedules, and occasional classroom disruptions, which required flexibility in scheduling and data generation procedures. Despite these realities, the research process enabled the generation of rich, contextually grounded data aligned with the purpose of the study.

The chapter continues with a detailed presentation of the findings, supported by discussion of relevant literature and incorporating the theoretical framework for the study. It concludes with a summary of the key insights that emerged from the research.

4.2. THEMES AND SUB-THEMES IDENTIFIED

I identified three themes from the analysis of data considering the aims, objectives, main research question, research sub-questions, and the theoretical framework. The themes and sub-themes that emerged from the thematic analysis are presented in Table 4.1, which provides an overview of the relationships among the main research question, the research sub-questions, the interview questions, and the themes and sub-themes identified during the data analysis.

The themes presented in Table 4.1 serve as the analytical framework for this chapter and guide the structured discussion that follows. Each theme is discussed in relation

to the relevant research sub-question, supported by direct quotations from participants and observational evidence simultaneously.

Table 4.1: Themes and sub-themes emerging from participant interviews and observations

Main research question	**Research sub-questions**	**Interview questions**	**Themes**	**Sub-themes**
How do educators in the Umlazi District experience and utilise Generation Alpha learners' Multiple Intelligences to enhance classroom learning	**Research sub-question 1:** What teaching methods do Grade Seven educators use to address Generation Alpha learners' Multiple Intelligences in the Umlazi District?	**Question two:** How would you define teaching methodology? **Question three:** Can you list all the teaching methodologies that you employ when teaching your Grade Seven learners? **Question four:** Describe how you determine and use different teaching methodologies for different purposes when teaching your Grade Seven learners.	**Theme 1:** Teaching methodologies used to address MI for GA learners	**Sub-theme 1.1:** Direct and differentiated teaching methodologies **Sub-theme 1.2:** Collaborative and problem-based teaching methodologies **Sub-theme 1.3:** Creative, visual, and technological teaching methodologies

		Question six: What teaching methodology do you prefer? Please describe this methodology in detail and explain why it is your preferred method.		
	Research sub-question 2: What challenges do Grade Seven educators face in implementing teaching methods that cater to Generation Alpha learners' Multiple	**Question seven:** Have you experienced any challenges with specific methodologies when teaching your Grade Seven learners?	**Theme 2:** Challenges in implementing teaching methodologies	**Sub-theme 2.1:** Learner disengagement and classroom management **Sub-theme 2.2:** Resource limitations **Sub-theme 2.3:** Heavy workloads

	Intelligences in the Umlazi District?			
	Research sub-question 3: What support do Grade Seven educators receive to implement teaching methods that enhance Generation Alpha learners' Multiple Intelligences in the Umlazi District	**Question eight:** Since you started teaching, what professional development opportunities related to teaching methodologies have you been exposed to? **Question nine:** Is there anything else that you would like to add to our conversation about teaching methodologies?	**Theme 3:** Professional development and support needed for educators	**Sub-theme 3.1:** Gaps in pedagogical training **Sub-theme 3.2:** Limited professional development in Science, Technology, Engineering, and Mathematics (STEM) and language instruction **Sub-theme 3.3:** Need for professional development in MI training

4.3. THEMES AND LINKS TO SUB-THEMES AND LITERATURE

The presentation and discussion of findings are organised into three main sections, with data presentation and interpretation documented simultaneously to provide a coherent understanding of educators' experiences.

The first section addresses Theme One: Teaching methodologies used to address MI for GA learners. This theme was further refined into three sub-themes. These are Sub-theme one: Direct and differentiated teaching methodologies, Sub-theme two: Collaborative and problem-based teaching methodologies, and Sub-theme three: Creative, visual, and technological teaching methodologies.

The second section deals with Theme Two: Challenges in implementing teaching methodologies. This theme was further refined into three sub-themes. These are Sub-theme one: Learner disengagement and classroom management, Sub-theme two: Resource limitations, and Sub-theme three: Heavy workloads.

The third section deals with Theme Three: Professional development and support needed for educators. This theme was further refined into Sub-theme one: Gaps in pedagogical training, Sub-theme two: Limited professional development in STEM and language instruction, and Sub-theme three: Need for professional development in MI training.

For each theme and sub-theme, the data are presented and then discussed.

4.3.1. Theme One: Teaching methodologies used to address MI for GA learners

Theme one emerged in response to Research sub-question 1, which sought to explore the teaching methods Grade Seven educators use to address GA learners' MI in Umlazi District classrooms. As indicated in Table 4.1, this theme was informed by participants' definitions of teaching methodology, their descriptions of instructional practices, and their reflections on preferred teaching approaches. The findings reveal that educators employ a variety of teaching methodologies to accommodate diverse learner needs; however, the extent and consistency of their implementation are influenced by contextual constraints.

The three sub-themes for Theme 1 are now presented and discussed.

4.3.1.1. Theme One, Sub-theme One: Direct and differentiated teaching methodologies

Educators frequently described the use of direct instruction as a foundational teaching strategy, particularly when introducing new concepts or addressing gaps in learners' prior knowledge. Participants indicated that lessons often begin with explicit explanations, repetition of key ideas, and guided practice to ensure comprehension.

Participant 2 (P2) stated:

I deliver explicit instructions on ideas, dissecting them gradually.

Similarly, P4 explained:

For learners having difficulties, I apply straightforward techniques and reiterate the explanations until they grasp the material.

Alongside direct instruction, participants reported using differentiated teaching approaches to accommodate learners working at different levels within the same classroom. Classroom observations confirmed that lessons frequently began with whole-class explanations, followed by guided practice. These practices suggest that direct instruction is used to establish structure and clarity in classrooms characterised by uneven learner readiness.

P2 noted:

I modify my teaching methodologies according to the learners' capabilities, making sure that each person receives the assistance they require.

P5 added:

When I plan my lessons, I think about who might struggle with the topic and who might require a greater challenge.

Observations showed that educators provided additional scaffolding to struggling learners while offering extension tasks to others. However, differentiation was often implemented informally and responsively rather than through systematic planning. This suggests that while educators recognise learner diversity, practical constraints such as large class sizes and curriculum pacing limit the consistent application of structured differentiation.

These findings suggest that educators rely on direct instruction to establish clarity, maintain lesson structure, and support curriculum progression, particularly in classrooms characterised by varied learner readiness and foundational knowledge gaps.

This indicates that direct instruction is not only a preferred method, but also a practical response to contextual constraints such as large class sizes and varied learner readiness. It further suggests that educators prioritise control and structure in order to maintain lesson flow, even if this limits opportunities for engaging a wider range of intelligences.

Differentiation was used to manage learner diversity within the realities of classroom practice, allowing educators to respond to learners' individual needs while maintaining instructional pace.

This pattern aligns with research indicating that explicit teaching remains essential for supporting comprehension in contexts where learners present with varied levels of prior knowledge and language proficiency (Darling-Hammond et al., 2020; Killen, 2018). Differentiated instruction is similarly recognised as a key approach to addressing learner diversity and promoting equitable access to learning (Bates, 2019; Smith & Cekiso, 2020; Tomlinson, 2014).

From a theoretical perspective, Gardner's (1983; 1999) Theory of MI provides a useful lens for interpreting these practices. Direct instruction, particularly when centred on explanation, questioning, and structured problem-solving, primarily engages linguistic and logical-mathematical intelligences, which are traditionally emphasised in formal schooling contexts. This suggests that classroom practices may unintentionally privilege certain intelligences over others, resulting in an imbalance in how learners engage with content. Learners whose strengths lie outside these dominant intelligences may therefore be less actively engaged in the learning process.

However, Gardner's (1983) framework highlights the diversity of learners' cognitive strengths and the need for varied instructional approaches to support meaningful engagement.

The educators' attempts at differentiation therefore reflect an implicit recognition of diverse intelligences among learners and the need to adapt teaching to accommodate

varying levels of understanding. For GA learners, structured guidance combined with responsive differentiation supports foundational learning while allowing flexibility in how learners engage with content.

Overall, the Theme One, Sub-theme One findings indicate that direct and differentiated teaching methodologies play a central role in supporting learner understanding and progression in Grade Seven classrooms. These practices demonstrate how educators address diverse learning needs in everyday teaching, reflecting the practical application of MI-informed instructional approaches.

4.3.1.2. Theme One, Sub-theme Two: Collaborative and problem-based teaching methodologies

Participants described collaborative learning as a commonly used strategy to promote understanding and peer support among learners. Educators reported using group work and pair work to encourage interaction, particularly when learners struggled to grasp concepts independently.

Participant 8 stated:

I pair a strong learner with a weaker one because they explain better to each other in their home language.

Educators also described incorporating problem-based and real-life tasks to support learning. Participant 3 added to this statement by stating that:

When learners work together, they understand better because they can discuss and help one another.

Classroom observations confirmed these practices, as learners were frequently observed working in pairs or small groups, sharing ideas and assisting peers during tasks. Educators often circulated between groups, providing guidance and monitoring learner engagement.

Participant 12 explained:

I use real-life experiences, such as showing a receipt for a shop purchase and budgeting.

Collaborative and problem-based learning approaches reflected the use of authentic learning experiences that encouraged learners to apply knowledge in meaningful and interactive contexts. Educators described group work, pair work, and real-life problem-solving tasks as strategies that enabled learners to engage actively with content and support one another's understanding through discussion and shared exploration.

These practices align with social constructivist principles, which emphasise that learning occurs through interaction, dialogue, and participation within a social environment (Vygotsky, 1978). This indicates that collaborative methodologies are not only used to support understanding, but also serve as a practical strategy for managing learner diversity within the classroom. It further suggests that peer interaction becomes a resource for learning in contexts where individualised teacher support may be limited.

From a theoretical perspective, Gardner's (1999) Theory of MI provides further insight into these practices. Collaborative methodologies strongly engage interpersonal intelligence, as learners interact, communicate ideas, and respond to one another's perspectives. Problem-based activities also activate logical-mathematical intelligence through reasoning and shared problem-solving, as well as linguistic intelligence through explanation and discussion. These approaches reflect MI-informed teaching, which emphasises the importance of providing learners with varied opportunities to access and process knowledge. However, the effectiveness of these approaches is dependent on classroom management and learner behaviour, which may limit their consistent implementation**.**

As discussed in Chapter Two, collaborative and inquiry-based learning approaches are particularly relevant for GA learners, who demonstrate a preference for interactive, participatory, and socially connected learning environments (McCrindle & Fell, 2020; Seemiller & Grace, 2024). By working together and engaging with real-life problems, learners can construct knowledge actively rather than passively receiving information.

Overall, collaborative and problem-based methodologies illustrate how educators attempt to create learner-centred environments that support interaction, shared learning, and the development of interpersonal and cognitive skills. These practices demonstrate the application of MI-informed teaching strategies that promote engagement and enable learners to actively participate in the learning process.

4.3.1.3. Theme One, Sub-theme Three: Creative, visual, and technological teaching methodologies

Educators described using creative and visual approaches to enhance learner engagement and understanding across subjects. Participants referred to storytelling, role-playing, diagrams, posters, demonstrations, and visual timelines as strategies for simplifying complex content and sustaining learner interest.

Participant 9 stated:

My educational approach involves role-playing to boost classroom interaction and storytelling to simplify complex subjects.

Similarly, P7 explained:

We use role-playing activities like setting up real-life scenarios so learners can understand concepts better.

P6 noted:

Using maps, timelines, and dramatizations helps learners understand historical events better.

P10 added:

The methods I use include storytelling to make learners understand topics and remember them.

P9 further emphasised:

Maps and pictures help learners understand even when they struggle with English.

Classroom observations supported these accounts, as learners appeared more attentive and actively involved during lessons that incorporated visual aids, demonstrations, and dramatisation. Creative approaches enabled educators to simplify content and present information in accessible forms that supported varied learning preferences.

Technology was also identified as a strategy for enhancing lesson delivery and interaction.

Participant 5 noted:

I use educational apps and online resources to support lessons, making lessons more interactive.

P3 indicated:

I use videos and pictures when introducing topics because learners respond better when they can see and relate to the content.

Observations showed that when technology was used, it supported visual explanations, demonstrations, and concept reinforcement, contributing to learner participation and understanding.

These practices reflect multimodal teaching approaches in which content is presented through visual, verbal, and experiential forms. This suggests that educators are intentionally or intuitively drawing on multiple intelligences to enhance understanding, even if not always explicitly guided by MI theory. However, the extent to which these approaches are consistently applied remains influenced by available resources and time constraints.

Research suggests that multimodal instruction strengthens comprehension by allowing learners to process information through multiple cognitive pathways and sensory experiences (Ziatdinov & Cilliers, 2021). Creative strategies such as storytelling, role play, and demonstration therefore enable learners to connect abstract ideas to meaningful experiences.

From a theoretical perspective, Gardner's (1999) Theory of MI provides depth to understanding these practices. Visual teaching strategies activate spatial intelligence through diagrams, maps, and imagery, while role-play and demonstrations support bodily-kinaesthetic intelligence by engaging movement and action. Storytelling and explanation strengthen linguistic intelligence, enabling learners to interpret and express ideas through language. The integration of these approaches reflects MI-informed teaching, where educators intentionally present content through varied modes to accommodate diverse cognitive strengths.

As outlined in Chapter Two, GA learners respond strongly to visual, interactive, and multimedia learning environments due to their exposure to digital and visual forms of communication from an early age (McCrindle & Fell, 2020; Seemiller & Grace, 2024).

Creative and visual methodologies therefore align with their learning preferences by making learning engaging, relatable, and easier to interpret.

Overall, the Theme One, Sub-theme Three findings indicate that educators utilise creative, visual, and technological methodologies to present content in varied and meaningful ways. These approaches demonstrate efforts to activate MI and support learner engagement through multimodal instructional practices that extend beyond traditional explanation-based teaching.

4.3.1.4. Summary of Theme one

Theme 1 illustrates the range of teaching methodologies educators use to address the MI of GA learners. Participants described combining direct instruction, differentiation, collaborative learning, and creative approaches to support learner engagement and understanding, with varying degrees of consistency across classroom contexts. The discussion now moves forward to Theme two, highlighting the challenges faced when implementing MI-aligned teaching methodologies.

4.3.2. Theme Two: Challenges hindering effective teaching implementation

Theme Two addresses Research sub-question Two and focuses on the challenges educators experience when implementing teaching methodologies aimed at addressing MI. Participants identified learner-related, resource-related, and curriculum-related challenges that influence classroom practice.

4.3.2.1. Theme Two, Sub-theme One: Learning disengagement and classroom management

Participants reported learner disengagement during lessons, particularly when instruction relied heavily on prolonged educator talk or abstract content that learners struggled to connect with. Educators indicated that maintaining attention and participation was a recurring challenge in their classrooms.

Participant 1 stated:

I have experienced challenges with the lecture method… learners often lose focus quickly.

P5 added:

Their behaviour disrupts lessons; group work can be chaotic because some learners distract others.

Similarly, P9 explained:

Group work can become chaotic because some learners distract others.

Classroom observations confirmed these experiences, as learners were often passive during extended explanations and required frequent redirection during group activities. Educators were observed shifting between managing behaviour and maintaining lesson flow, highlighting the complexity of sustaining engagement while progressing with curriculum delivery.

These findings suggest that learner engagement is closely linked to the nature of classroom interaction and the extent to which lessons capture learners' interest and participation. When learners are unable to connect meaningfully with lesson content, disengagement often manifests as inattentiveness, disruptive behaviour, or limited participation. This indicates that disengagement is not solely a behavioural issue, but reflects a mismatch between teaching methodologies and learners' cognitive and engagement preferences. It further suggests that when instruction does not align with learners' dominant intelligences, participation and attention are negatively affected

As discussed in Chapter Two, GA learners are accustomed to fast-paced, interactive, and visually stimulating environments, and may struggle to remain engaged in lessons that rely heavily on passive listening or abstract explanations (McCrindle & Fell, 2020; Seemiller & Grace, 2024). Their learning preferences emphasise participation, collaboration, and meaningful interaction, which makes sustained attention more difficult when instruction does not align with these expectations.

From a theoretical perspective, Gardner's (1983; 1999) Theory of MI provides insight into the relationship between engagement and learning. When classroom instruction predominantly activates linguistic or logical-mathematical intelligences through explanation-based teaching, learners whose strengths lie in other intelligences, such as interpersonal, bodily-kinaesthetic, or spatial, may struggle to remain engaged. Disengagement therefore reflects not only behavioural challenges but also a mismatch between instructional approaches and learners' cognitive strengths.

The literature further indicates that maintaining engagement requires balancing structure and interaction, particularly in classrooms with diverse learning needs (Darling-Hammond et al., 2020; Prensky, 2010). Educators must simultaneously

manage behaviour, support participation, and sustain instructional momentum, which can be difficult in dynamic classroom environments.

Overall, the Theme Two, Sub-theme One findings highlight that learner disengagement and classroom management are closely interconnected, influencing educators' ability to maintain focus, participation, and instructional flow. These challenges shape the classroom environment and affect how learning occurs, particularly when learners struggle to connect with the lesson content or maintain sustained attention.

4.3.2.2. Theme two, Sub-theme two: Resource limitations

Resource scarcity emerged as a significant factor influencing educators' ability to implement diverse and intelligence-responsive teaching methodologies. Participants consistently indicated that limited access to teaching materials, visual resources, and technological tools restricted the range of instructional approaches they could employ.

P7 shared:

We lack colour photos and visual materials, so we rely heavily on textbooks with limited visuals or internet resources, which are not always accessible.

Classroom observations supported these accounts, as lessons that attempted to incorporate visual aids, demonstrations, or experiments were often constrained by the availability of materials and equipment. In some instances, educators improvised using available resources, while in others, planned activities were adapted to suit existing classroom conditions.

Inquiry-based activities, when implemented, demonstrated strong learner engagement. For example, learner-led experiments were observed to activate naturalistic and bodily-kinaesthetic intelligences, as learners engaged physically and explored concepts through hands-on experiences. However, the effectiveness of these activities was sometimes constrained by contextual factors such as limited resources, inadequate materials, and learners' minimal prior exposure to inquiry-based learning approaches.

P8 explained:

Learners conducted experiments based on their own questions… however, some struggled to formulate hypotheses independently.

This suggests that while inquiry-based methodologies can support active learning and the development of MI, their implementation is influenced by resource availability and the level of structured support provided to learners. Within this theme, these findings highlight how educators attempt to use learner-centred, MI-aligned strategies, but must adapt them to the practical realities of their classroom contexts due to a lack of resources.

Participants also highlighted the socio-economic realities that affected learner participation in project-based tasks.

P9 reflected:

Many learners cannot afford materials for projects; the school lacks sufficient supplies, so I often improvise with recycled items.

While such improvisation demonstrated educator creativity and commitment, it could not fully substitute for adequately resourced learning environments that support experiential and inquiry-based instruction.

Language challenges further intersected with resource limitations, influencing learners' participation and engagement in classroom activities.

P4 noted:

Many learners struggle to speak in English during group discussions and often revert to their native language.

These findings suggest that resource limitations extend beyond physical materials to include linguistic and contextual factors that shape classroom interaction and participation. This highlights that the implementation of MI-informed teaching is heavily dependent on contextual conditions. While MI promotes diverse teaching approaches, the lack of resources limits educators' ability to activate certain intelligences, particularly those requiring movement, materials, or technology.

As discussed in Chapter Two, unequal access to educational resources remains a persistent challenge within disadvantaged South African schooling contexts (DBSA, n.d.; Van De Werfhorst et al., 2022). The digital divide, limited infrastructure, and socio-economic constraints influence what teaching methodologies are feasible and sustainable in everyday classroom practice.

From a theoretical perspective, Gardner's (1983; 1999) Theory of MI highlights the importance of varied instructional approaches that engage different cognitive strengths. However, the activation of intelligences such as spatial, bodily-kinaesthetic, musical, and naturalistic often requires materials, movement, experimentation, and sensory engagement. When such resources are limited, instruction may become restricted to more traditional forms of content delivery, reducing opportunities for learners to engage through multiple modes.

The findings therefore indicate that resource constraints shape the extent to which educators can implement MI-informed teaching. While educators attempt to incorporate diverse instructional strategies, the realities of material scarcity, socio-economic challenges, and linguistic diversity influence how and when these approaches can be applied.

Overall, resource limitations significantly influence classroom practice by determining the range of teaching methodologies available to educators and the extent to which MI can be consistently engaged in the learning process.

4.3.2.3. Theme two, Sub- theme three: Heavy work loads

Participants consistently expressed tension between the demands of curriculum coverage and their efforts to implement varied and responsive teaching approaches. Educators reported that the pressure to complete syllabus requirements, prepare assessments, and manage administrative responsibilities often limited the time available to adapt instruction to diverse learner needs.

P2 explained:

Relying too heavily on one method, such as lectures, can be ineffective, but balancing learners' varying needs and curriculum demands is challenging.

P6 expressed:

Sometimes we want to try new methods, but there isn't enough time or resources.

Classroom observations indicated that lessons frequently followed structured pacing aligned with curriculum expectations, with educators prioritising content completion and assessment preparation. This often required maintaining a steady instructional rhythm, leaving limited opportunity to slow down for individual support or extended learner interaction.

Lectures were often described as less engaging for learners; however, educators indicated that they relied on them due to the demands of curriculum coverage and limited preparation time. When lessons shifted to project-based or group activities, learner engagement improved, but these approaches required additional planning, preparation of materials, and closer classroom monitoring, which added to the educators' workload.

Similarly, P10 highlighted the challenge of balancing learner diversity with curriculum demands:

Some learners struggle with basic comprehension, requiring direct instruction, but others benefit from group problem-solving, which can be challenging to balance.

This finding reflects the practical workload pressures experienced by educators. This suggests that educators are often required to make practical trade-offs between ideal teaching practices and manageable workload demands. As a result, teaching methodologies are shaped not only by pedagogical knowledge, but also by time constraints and institutional expectations.

Differentiating instruction, preparing varied activities, and supporting learners at different levels require significant time and effort, particularly in overcrowded classrooms. As a result, educators often revert to direct instruction as a more manageable approach for maintaining curriculum pace, even though learner-centred strategies may lead to higher engagement. These findings therefore demonstrate how workload influences the selection and implementation of teaching methodologies within everyday classroom practice.

The Theme Two, Sub-theme Three findings suggest that educators experience ongoing pressure to manage time efficiently while addressing varied learner abilities. The need to progress through curriculum content often constrains the consistent implementation of more flexible and interactive approaches.

From a theoretical perspective, Gardner's (1983; 1999) Theory of MI emphasises the importance of varied instructional strategies that allow learners to engage with content through different cognitive strengths. However, such approaches often require additional planning time, flexible pacing, and opportunities for learner exploration. When educators are required to prioritise curriculum completion and assessment

demands, the implementation of intelligence-responsive methodologies becomes more difficult to sustain.

Literature discussed in Chapter Two similarly highlights how rigid curriculum structures and workload demands limit pedagogical flexibility and innovation in classroom practice (Fullan, 2016; Moloi & Mhlanga, 2021). Educators must balance institutional expectations with learner-centred practices, often making pragmatic decisions to prioritise curriculum progression.

Overall, heavy workloads influence the extent to which educators can consistently implement varied instructional approaches. Time pressures and curriculum demand shape classroom practice, affecting how learning is structured and how opportunities for differentiated and intelligence-responsive engagement are incorporated into lessons.

4.3.2.4. Summary of Theme Two

Theme Two highlights the challenges that Grade Seven educators experience when attempting to implement teaching methodologies that address the MI of GA learners. The findings showed that learner disengagement was often linked to extended educator-centred instruction and abstract content, while overcrowded classrooms and classroom management demands limited the consistent use of collaborative and learner-centred approaches. Resource constraints, including limited access to teaching materials and technology, further restricted the educators' ability to engage a wider range of intelligences, particularly spatial, bodily-kinaesthetic, and musical intelligences. These findings resonate with literature discussed in Chapter Two, which emphasises that overcrowding, socio-economic inequality, and limited resources continue to shape classroom practice in disadvantaged contexts and restrict the implementation of learner-centred methodologies (Fleisch, 2008; Spaull, 2013). In addition, curriculum coverage requirements and heavy workloads compelled educators to rely more heavily on direct instruction, even when more interactive approaches appeared to enhance learner engagement, reflecting arguments that educators often prioritise structured teaching strategies in response to systemic pressures and accountability demands (Darling-Hammond et al., 2020; Killen, 2018). From a theoretical perspective, Gardner's (1999) Theory of MI underscores the importance of varied instructional approaches to support diverse cognitive strengths;

however, as highlighted in Chapter Two, the practical application of MI-informed teaching is frequently constrained by contextual realities within under-resourced schools (Tomlinson, 2014). Collectively, these findings indicate that although educators demonstrate awareness of and commitment to responsive, MI-aligned practices, structural and institutional challenges limit their consistent implementation, thereby reinforcing the need for sustained professional development and systemic support, which is explored further in Theme 3.

4.3.3. Theme Three: Professional development and support for educators

Theme Three explores the professional development and institutional support available to Grade Seven educators and how these influence their capacity to implement teaching methodologies that address the MI of GA learners. Participants reflected on their exposure to training on teaching methodologies, differentiation, and learner-centred practices, as well as on the extent to which this support was relevant to their classroom realities. The findings reveal that while educators recognise the importance of adapting their teaching to accommodate diverse learner needs, limited access to sustained, practical, and context-responsive professional development constrains their ability to implement MI-aligned methodologies effectively. This indicates that the gap is not in educators' willingness to adapt, but in the lack of structured support to translate theoretical knowledge into practice. It further suggests that without sustained and context-specific training, MI remains a conceptual framework rather than a consistently applied teaching approach

This theme, therefore, examines the nature of existing professional development, identifies gaps in pedagogical support, and highlights educators' expressed need for targeted training that aligns with both MI theory and the challenges of teaching in disadvantaged school contexts.

4.3.3.1. Theme three, Sub-theme one: Gaps in pedagogical training

Educators reported limited exposure to professional development focused on practical, learner-centred, and differentiated teaching methodologies. Participants indicated that although expectations exist for educators to address diverse learner needs, the training provided often does not equip them with concrete strategies for doing so in classroom practice.

P11 stated:

We were never shown how to teach differently for all learners.

This response reflects a disconnect between pedagogical expectations and the practical preparation provided to educators. Several participants emphasised that professional development opportunities were either infrequent or administrative in focus, offering limited guidance on classroom methodologies.

P1 explained:

I have not been exposed to much professional development focused on teaching methodologies. The district occasionally offers workshops, but these tend to focus more on administrative tasks rather than teaching methodologies. I believe I would benefit more from training that covers alternative methods to make history more interactive and engaging for my learners.

Participants including P1, P3, P8, and P10 highlighted the absence of sustained training that supports the practical implementation of diverse teaching strategies. Although educators recognised the importance of addressing learner differences, many indicated uncertainty about how to translate this expectation into daily classroom practice.

Research indicates that effective professional development must be continuous, practice-based, and directly linked to classroom realities in order to meaningfully influence teaching practice (Darling-Hammond and Bransford, 2007; Darling-Hammond et al., 2020). However, participants' experiences suggest that existing training opportunities rarely provide modelling, coaching, or opportunities for classroom application.

From a theoretical perspective, Gardner's (2011) Theory of MI emphasises that learners possess diverse cognitive strengths requiring varied instructional approaches. Armstrong (2009) argues that educators must be trained to translate MI theory into lesson design, assessment strategies, and classroom interaction. In the absence of such training, MI often remains a theoretical concept rather than a practical teaching framework.

P11 reiterated:

We never learned how to teach differently or cover content for diverse learners.

This highlights a gap between theoretical awareness and pedagogical application. Although some educators attended workshops on differentiated instruction or cooperative learning, these were not accompanied by sustained support or contextual guidance.

Tomlinson (2014) emphasises that differentiation requires deliberate teacher preparation, structured planning, and ongoing support rather than spontaneous adjustment. This aligns with Killen's (2015) view that effective teaching depends on educators' ability to intentionally select and adapt methodologies in response to learner diversity. From a theoretical perspective, Gardner's (1999) Theory of MI further supports the need for varied instructional approaches that accommodate different learner strengths. As discussed in Chapter Two, the implementation of such approaches in disadvantaged contexts is often shaped by systemic constraints, including limited resources and overcrowded classrooms (Fleisch, 2008; Spaull, 2013).

Within the South African context, studies have highlighted uneven access to meaningful professional development and the need for stronger pedagogical support for educators working in diverse classrooms (Levy, Cameron, Hoadley & Naidoo, 2018; Spaull, 2013). Without such support, expectations for learner-centred and intelligence-responsive teaching remain difficult to sustain.

In the context of GA learners, who require interactive, multimodal, and flexible teaching approaches, the absence of targeted pedagogical training becomes particularly significant. Educators are expected to respond to diverse intelligences and learning preferences, yet many lack structured guidance on how to consistently implement these approaches.

Overall, the Theme Three, Sub-theme One findings indicate that gaps in pedagogical training limit educators' capacity to implement MI-informed and differentiated teaching methodologies. While educators recognise the importance of responding to learner diversity, insufficient professional preparation restricts their ability to translate this understanding into sustained classroom practice.

4.3.3.2. Theme three, Sub-theme two: Limited professional development in STEM and language Instruction

Participants noted limited access to professional development focused specifically on language instruction and STEM pedagogy. Educators indicated that although some

workshops were available, these often-assumed learners possessed foundational literacy and numeracy skills that did not reflect the realities of their classrooms.

P5 explained:

The workshops assume learners already have strong English, which is not our reality.

Participants such as P3, P7, and P11 similarly identified limited training in language and STEM teaching methodologies as a barrier to effectively supporting learners' linguistic and logical-mathematical development.

P5 added:

The workshops I attended focused on teaching English as a second language and developing literacy skills. The workshops provide value, yet they typically presuppose that learners possess basic English skills, which does not match my classroom reality.

These findings suggest a mismatch between professional development content and classroom needs. Educators reported difficulty supporting learners who enter classrooms with limited English proficiency, particularly in contexts where language serves as the primary medium for instruction and assessment.

From a theoretical perspective, Gardner's (2011) Theory of MI emphasises that linguistic and logical-mathematical intelligences are foundational for academic learning, as they underpin reading, communication, reasoning, and problem-solving. When learners experience barriers in language development or mathematical reasoning, their ability to engage with curriculum content across subjects becomes constrained.

Tomlinson (2014) argues that instruction must be aligned with learners' current levels of readiness and gradually scaffolded to support skill development. Without specialised training in language pedagogy, educators may struggle to differentiate instruction effectively for learners with varying levels of proficiency.

Within the South African context, research highlights the challenges educators face in supporting multilingual classrooms and developing literacy skills among learners who are learning in a second or third language (Levy, Cameron, Hoadley & Naidoo, 2018; Spaull & Pretorius, 2019). These challenges require targeted professional

development that equips educators with strategies for language scaffolding, vocabulary development, and comprehension support.

Regarding STEM education, participants emphasised the need for training that supports inquiry-based and problem-solving approaches aligned with learners' cognitive development.

P7 remarked:

Workshops on integrating STEM education and project-based learning have been beneficial, especially in resource-limited environments where creativity is essential.

Inquiry-based and project-based learning approaches are recognised for strengthening logical-mathematical intelligence by promoting reasoning, experimentation, and problem-solving (Gardner, 2011). Such approaches also align with the learning preferences of GA learners, who benefit from interactive, exploratory, and technology-supported environments (McCrindle & Fell, 2020).

Educators indicated, however, that without sufficient training in STEM pedagogy, it remains difficult to implement these approaches consistently and effectively. Effective STEM teaching requires not only content knowledge but also pedagogical strategies that support inquiry, collaboration, and application (Darling-Hammond et al., 2020).

Overall, the Theme Three, Sub-theme Two findings indicate that limited professional development in language and STEM instruction constrains educators' ability to strengthen linguistic and logical-mathematical intelligences in the classroom. Educators recognise the importance of these foundational competencies; however, insufficient subject-specific training limits their capacity to support learners effectively and to implement inquiry-based and language-rich instructional practices consistently.

4.3.3.3. Theme three, Sub-theme three: Impact of professional development on teaching practices

Where professional development opportunities were accessed, educators reported noticeable shifts in their teaching practices. Participants described improvements in their ability to differentiate instruction, incorporate learner-centred strategies, and experiment with more interactive approaches.

P8 reflected:

The one workshop I attended helped me differentiate better, but we need more of that.

These accounts suggest that professional development can influence classroom practice when it is relevant and practically oriented. Some educators reported increased confidence in adapting instruction and engaging learners through varied methodologies aligned with MI-informed teaching.

The impact of professional development, however, is not uniform. Whereas some participants experienced positive changes, others felt that workshops lacked contextual relevance to their classroom environments.

P3 stated:

Workshops on critical thinking and engagement are helpful, but they often assume learners have ample resources, which is not the case for my school.

This mismatch reduced the effectiveness of professional learning, particularly in under-resourced contexts. Training that did not reflect socio-economic realities or classroom constraints was difficult to implement consistently.

From a theoretical perspective, Gardner's (2011) Theory of MI highlights the importance of varied instructional approaches that engage learners cognitively, socially, and emotionally. Participants indicated that where professional development supported collaborative learning, reflection, and learner-centred strategies, it enabled them to engage interpersonal and intrapersonal intelligences more effectively. For example, methodologies such as group work, peer interaction, and reflective activities were perceived as beneficial in supporting learners' social and emotional development, particularly in contexts where learners require additional motivational and relational support. Participants also highlighted the value of sustained professional learning communities and technology-focused training.

P8 noted:

Membership in professional learning communities, along with coding and robotics workshops, enabled me to integrate technology into my educational approach.

Such experiences supported the integration of logical-mathematical and bodily-kinaesthetic intelligences through hands-on problem-solving and technology-based

activities. Collaborative professional learning spaces also enabled educators to share strategies, reflect on practice, and adapt methodologies collectively.

Despite these benefits, several participants indicated that professional development did not always lead to consistent pedagogical transformation.

P9 explained:

I still feel like I am missing a transparent methodology that works consistently. Sometimes, I am just trying to keep up with demands rather than mastering specific methods.

Similarly, P10 highlighted the gap between training and classroom realities: *Workshops often overlook under-resourced schools with learners facing behavioural and socio-economic challenges. Teaching requires figuring out a lot on your own.*

These Theme Three, Sub-theme Three findings indicate that while professional development has the potential to strengthen instructional practice, its impact depends on sustained support, contextual relevance, and opportunities for educators to apply new strategies in their own classrooms. As discussed in Chapter Two, educators are expected to adapt their teaching methodologies to meet changing learner needs, particularly in disadvantaged contexts shaped by socio-economic barriers and limited resources (De Clercq, 2020; Achieng et al., 2024). Professional learning is therefore most meaningful when it equips educators with practical, learner-centred strategies that can be implemented under real classroom conditions, including overcrowding, language diversity, and limited access to teaching and learning resources (Mbatha, 2022; Spaull & Jansen, 2019). In addition, the application of MI-informed teaching requires educators to understand learner diversity and intentionally vary instructional approaches to engage different intelligences, which is unlikely to be achieved through once-off training alone (Armstrong, 2009; Gardner, 1999). Where professional development is ongoing and supported at school level, educators are better positioned to create motivating learning environments, strengthen learner participation, and improve learning outcomes, particularly for disadvantaged learners (Darling-Hammond et al., 2020; Du Plessis & Mestry, 2019).

4.3.3.4. Summary of Theme Three.

Theme 3 highlights the critical role of professional development and institutional support in enabling educators to implement teaching methodologies that address the MI of GA learners. The findings revealed that many educators had limited exposure to practical, classroom-focused training on differentiated instruction and MI-aligned teaching methodologies. Professional development opportunities were often described as infrequent, generic, or misaligned with the realities of under-resourced and multilingual classrooms. As a result, educators relied heavily on personal experience, improvisation, and peer support to adapt their educator practices. Where relevant and sustained professional development was available, participants reported increased confidence and improved capacity to engage learners using varied methodologies. Overall, the findings indicate that without targeted, context-sensitive professional development and stronger institutional support, educators' efforts to implement MI-informed and learner-centred practices remain constrained, despite their willingness and commitment to improving teaching and learning for GA learners.

4.4. SUMMARY OF EMPIRICAL FINDINGS

The research findings demonstrate that educators who are aware of diverse learner needs deliberately apply teaching methodologies that align with Gardner's (1983; 1999) Theory of MI. The data indicate that educators recognise the need for multiple entry points into the curriculum to accommodate varied learner abilities, learning preferences, and language competencies. This approach aligns with Tomlinson's (2014) principles of differentiated instruction and Prensky's (2001) assertion that contemporary learners benefit from interactive and flexible learning environments. Importantly, educators did not express resistance to innovative or learner-centred approaches; rather, they responded positively to learner diversity when classroom conditions and resources allowed.

The findings further reveal that the effective and consistent implementation of MI-informed teaching methodologies is significantly constrained by institutional and systemic factors within disadvantaged educational contexts. Limited access to resources, including technological tools and essential teaching materials, restricts educators' ability to meaningfully engage spatial, musical, and bodily-kinaesthetic intelligences. These findings support analyses of the digital divide and educational inequality in South Africa (DBSA, n.d.; Van De Werfhorst et al., 2022). In addition,

curriculum overload and accountability pressures reduce opportunities for pedagogical innovation, compelling educators to prioritise syllabus coverage over creative and inquiry-based learning approaches (Moloi & Mhlanga, 2021). Such systemic constraints conflict with the flexible, learner-centred methodologies required to support GA learners effectively (Karami, 2022; McCrindle & Wolfinger, 2019).

Despite these challenges, the findings illustrate that educators demonstrate considerable creativity, adaptability, and professional commitment. Educators attempted to integrate collaborative learning, visual tools, and differentiated activities within their limited means, reflecting an alignment between Gardner's (1983) emphasis on multiple learning pathways and Vygotsky's (1978) social learning theory. These practices indicate educators' efforts to create inclusive learning environments, even in the face of unfavourable external conditions. Furthermore, the findings consistently show a need for sustained professional development that explicitly supports the practical implementation of MI theory in classroom instruction. Participants reported that both pre-service training and in-service development opportunities provided limited guidance on applying interactive, multimodal, and inquiry-based strategies. This supports the view that effective teaching requires a balance between theoretical knowledge and practical application (Killen, 2013), and that practice-focused professional development plays a critical role in shaping classroom practices, particularly in disadvantaged educational settings (Darling-Hammond et al., 2020).

4.5. CHAPTER SUMMARY AND CONCLUDING REMARKS

This chapter presented and discussed the empirical findings of the study, focusing on how Grade Seven educators in the Umlazi District, KZN, experience and utilise teaching methodologies to address the MI of GA learners within disadvantaged educational contexts. The analysis of semi-structured interviews and classroom observations, presented in this chapter, revealed that educators demonstrate a clear awareness of learner diversity and make deliberate efforts to employ a range of teaching methodologies aligned with MI theory to enhance learner engagement and understanding.

The findings showed that educators commonly draw on direct instruction, differentiation, collaborative learning, and creative, visual, and context-based strategies to accommodate learners' varied cognitive strengths and learning

preferences. These approaches reflect the educators' recognition of the need for multiple entry points into the curriculum and their responsiveness to the characteristics of GA learners. However, the findings presented in this chapter also revealed that the consistent implementation of MI-aligned teaching methodologies is significantly constrained by systemic factors, including limited access to resources and technology, curriculum overload, time pressures, and insufficient professional development. These constraints often compel educators to prioritise content coverage over flexible, learner-centred and inquiry-based practices, despite their awareness of the benefits of such approaches.

Despite these challenges, the findings highlight educators' adaptability, creativity, and professional commitment. Educators were observed improvising with available resources, leveraging peer collaboration, and selectively integrating learner-centred practices, where possible, to support inclusive learning environments. At the same time, the findings underscore a clear need for sustained, context-responsive professional development that equips educators with practical strategies for implementing MI theory in under-resourced classrooms.

The findings presented in this chapter demonstrate that while educators possess the knowledge and willingness to implement MI-informed teaching methodologies, structural and institutional constraints significantly limit their effectiveness. These findings provide a critical foundation for the recommendations presented in Chapter Five, which propose strategies to strengthen professional development, improve resource provision, and support educators in implementing MI-aligned pedagogical practices more consistently and effectively in disadvantaged school contexts.

CHAPTER FIVE: SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1. INTRODUCTION

This study investigated how Grade Seven educators in the Umlazi District of KwaZulu-Natal, South Africa, experience and utilise different teaching methodologies to address the multiple intelligences (MI) of Generation Alpha (GA) learners within disadvantaged educational contexts. Chapter Four presented and analysed the empirical findings derived from semi-structured interviews and classroom observations. Building on the literature reviewed and the empirical findings, this chapter concludes the study.

The chapter begins with a concise summary of the key themes emerging from the literature review, followed by a summary of the empirical findings of the study. It then presents a synthesis of similarities and contradictions between the literature and the empirical findings. The chapter then documents conclusions drawn in relation to the research questions and recommendations for educational practice, policy, and future research. The chapter concludes with an outline of the limitations of the study.

5.2. SUMMARY OF KEY THEMES IDENTIFIED FROM THE LITERATURE REVIEW

The findings of this study demonstrate that educators who are aware of diverse learner needs deliberately apply teaching methodologies aligned with Gardner's (1983; 1999) Theory of MI. The data indicate that educators recognise the importance of creating multiple entry points into the curriculum to accommodate varied learner abilities, learning preferences, and language competencies. These practices reflect principles of differentiated instruction (Tomlinson, 2014) and support the view that contemporary learners benefit from interactive and flexible learning environments (Prensky, 2001). Educators generally showed openness towards learner-centred and innovative approaches, particularly when classroom conditions and available resources supported such practices.

These findings go beyond simply describing classroom practices and suggest that the implementation of MI-informed teaching is largely shaped by contextual realities rather than purely by educators' instructional choices. This means that even when educators understand MI theory, their ability to apply it is influenced by factors such as resources, time, and classroom conditions.

The study further reveals that the consistent implementation of MI-informed teaching methodologies is constrained by institutional and systemic factors within

disadvantaged educational contexts. Limited access to resources, including technological tools and essential teaching materials, restricts educators' ability to engage a full range of intelligences, particularly spatial, musical, and bodily-kinaesthetic domains. These findings align with broader analyses of the digital divide and educational inequality in South Africa (DBSA, n.d.; Van De Werfhorst et al., 2022). Curriculum demands and accountability pressures also limit opportunities for pedagogical innovation, often compelling educators to prioritise syllabus coverage over inquiry-based and creative learning approaches (Moloi & Mhlanga, 2021). Such systemic conditions challenge the implementation of flexible, learner-centred pedagogies required for GA learners (Karami, 2022; McCrindle & Wolfinger, 2019).

Despite these constraints, the findings highlight educators' creativity, adaptability, and professional commitment. Participants described efforts to incorporate collaborative learning, visual supports, and differentiated activities within their available resources, reflecting alignment with Gardner's (1983) emphasis on multiple learning pathways and Vygotsky's (1978) social learning theory. These practices demonstrate educators' attempts to create inclusive learning environments even in the face of structural limitations.

A recurring outcome of the study was the need for sustained professional development that supports the practical implementation of MI theory in classroom practice. Participants reported that both pre-service preparation and in-service training offered limited guidance on applying interactive, multimodal, and inquiry-based teaching strategies. This reinforces the view that effective teaching requires a balance between theoretical understanding and practical application (Killen, 2018), and that practice-focused professional development is essential in shaping meaningful classroom practice, particularly in disadvantaged contexts (Darling-Hammond et al., 2020).

These findings resonate strongly with the literature reviewed in the study. However, the findings also extend existing theory by showing that while MI provides a strong framework for inclusive teaching, it is not always fully achievable in disadvantaged contexts. This challenges the assumption in the literature that MI can be applied consistently across all classroom settings without considering contextual constraints. Scholarship emphasises the global shift from traditional, educator-centred pedagogies towards learner-centred approaches that foster engagement, critical thinking, and

problem-solving (Barron & Darling-Hammond, 2008; Lynch, 2017). Such approaches are particularly relevant for GA learners, who are described as digital natives and who respond positively to interactive and multimodal learning environments (Wood, 2013; Prensky, 2001). Gardner's Theory of MI provides a framework for responding to learner diversity by recognising intelligence as multifaceted rather than singular (Gardner, 1983; 1999), while scholars such as Armstrong (2009) and Tomlinson (2014) and highlight its value for differentiated instruction. While the literature promotes MI as a flexible and inclusive teaching approach, the findings show that its application is often uneven in practice. This highlights a clear tension between what theory suggests and what is realistically possible in under-resourced classrooms.

At the same time, the realities of disadvantage in South African education are acknowledged in the literature, including overcrowded classrooms, limited access to technology, language barriers, and socio-economic challenges that influence learner engagement and achievement (DBSA, n.d; Spaull & Jansen, 2019). The digital divide remains a critical barrier to the implementation of technology-supported pedagogy (Van De Werfhorst et al., 2022; Van Dijk et al., 2002), while global shifts associated with the Fourth and Fifth Industrial Revolutions demand adaptable, human-centred, and skills-oriented approaches to teaching and learning (Mbatha, 2022; Schwab, 2016).

From a critical perspective, the findings of this study suggest that although educators recognise the value of MI-informed and learner-centred teaching methodologies, their implementation is largely shaped by contextual realities rather than individual willingness. The findings challenge assumptions that pedagogical transformation depends primarily on educator attitudes or resistance to change. Instead, they highlight how systemic inequalities, resource limitations, and curriculum pressures significantly influence classroom practice.

The study findings therefore support the argument that improving teaching for GA learners requires more than the promotion of innovative methodologies; it requires structural support, sustained professional development, and policy alignment that acknowledges the realities of disadvantaged schooling contexts. Without addressing these systemic conditions, expectations placed on educators to implement flexible,

multimodal, and technology-integrated pedagogies may remain aspirational rather than achievable.

Ultimately, this research contributes to the understanding that meaningful pedagogical change in disadvantaged contexts is not solely a matter of instructional choice. It is deeply connected to broader educational structures, support systems, and socio-economic conditions shaping teaching and learning in South African classrooms.

5.3. SUMMARY OF EMPIRICAL FINDINGS

This empirical study explored how Grade Seven educators in the Umlazi District apply teaching methodologies aligned with Gardner's MI theory in their classroom practice. Data were generated through semi-structured, open-ended interviews and classroom observations, providing rich insight into educators lived experiences, instructional practices, and contextual constraints.

The findings revealed that educators demonstrated a general awareness of MI and attempted to incorporate MI-aligned strategies in their classrooms, including differentiated instruction, group work, project-based learning, and creative and visual teaching approaches. However, the extent and consistency of MI implementation varied significantly across classrooms. Whereas some educators actively experimented with learner-centred and experiential methodologies, others relied predominantly on traditional lecture-based instruction, limiting opportunities to engage a broader range of intelligences.

The study also identified significant barriers to effective MI implementation. These included large class sizes, insufficient teaching and learning resources, limited access to technology, and inadequate professional development. Socio-economic challenges faced by learners—such as language difficulties, limited access to technology at home, and low levels of parental support—further contributed to learner disengagement. Despite these challenges, educators reported positive learner responses when MI-aligned methodologies were successfully implemented, including increased motivation, participation, and engagement.

5.4. SYNTHESIS OF RESEARCH FINDINGS (SIMILARITIES AND CONTRADICTIONS BETWEEN LITERATURE REVIEW AND EMPIRICAL STUDY)

The integration of the literature review with the empirical findings highlights both areas of alignment and points of divergence regarding the use of MI and appropriate teaching methodologies for GA learners in disadvantaged schools.

5.4.1. Areas of alignment

The empirical findings closely align with the literature in emphasising the importance of employing diverse teaching methodologies to accommodate learners with different intelligences. Both the literature and the empirical data highlight the value of direct and differentiated instruction, collaborative and problem-based learning, and creative, visual, and multimodal approaches in supporting learner engagement and understanding. Educators who implemented MI-informed strategies reported higher levels of learner motivation and participation, supporting Gardner's (1983) assertion that learners benefit from instruction that aligns with their cognitive strengths.

This alignment confirms the relevance of MI theory in supporting learner engagement and differentiated teaching. However, the findings also suggest that alignment with theory does not automatically lead to consistent classroom implementation.

In addition, the challenges identified by educators—such as overcrowded classrooms, limited resources, and insufficient professional development—are consistent with findings in the South African education literature, which documents systemic inequalities and constraints in disadvantaged school contexts.

5.4.2. Areas of divergence

A key divergence between the literature and classroom practice lies in the extent of MI implementation. Whereas the literature promotes MI as a comprehensive and integrated pedagogical framework, empirical findings indicate that it is often implemented only partially or inconsistently in practice (Armstrong, 2009). Similarly, although the literature highlights the potential of digital technologies to enhance MI-based teaching, many educators are unable to utilise such tools due to limited access to technological infrastructure. This divergence highlights a limitation in existing theoretical discussions, which often do not fully account for the realities faced by educators in disadvantaged contexts. It suggests that theory needs to be more context-sensitive.

5.5. RESEARCH CONCLUSIONS

The study's findings are presented in order of the research questions documented in Chapter One. Sub-questions are provided first, followed by the central research question.

Sub-Question 1 What teaching methods do Grade Seven educators use to address Generation Alpha learners' Multiple Intelligences in the Umlazi District?

Umlazi District Grade Seven educators integrate MI to different extents. Some educators who believe in MI-based activities differentiate instruction by implementing group work and project-based learning to meet learners' varied needs. However, MI was not being used consistently, as some educators resorted to traditional methods, such as lecturing, which did not engage the intelligence strengths of their learners.

Sub-Question 2**:** What challenges do Grade Seven educators face in implementing teaching methods that cater to GA learners' MI in the Umlazi District?

Issues educators face when implementing MI methodologies include class sizes that are too large, insufficient resources (such as technology and materials), and inadequate training in MI instruction. These factors continue to impede optimal MI delivery and promotion of variation in teaching methodologies.

Sub-Question 3: What support do Grade Seven educators receive to implement teaching methods that enhance GA learners' MI in the Umlazi District?

The educators who participated in the study mentioned that there is little to no support for implementing teaching methodologies tailored to the learners they encounter in the classroom. However, they mentioned attending workshops on the subject matter and union-based workshops focused on working with students who are challenging to teach. What teaching methods do Grade Seven educators use to address Generation Alpha learners' Multiple Intelligences in the Umlazi District?

Main Research Question**:** How do educators in the Umlazi District experience and utilise GA learners' MI to enhance classroom learning?

The study found that Grade Seven educators in the Umlazi District use a range of teaching methodologies to address the MI of GA learners; however, the implementation of these approaches varies across classroom realities. This suggests that while educators are aware of MI principles, their implementation is shaped more

by contextual pressures than by pedagogical intention alone. The findings showed that educators rely on a combination of direct instruction, differentiation, collaborative learning, and creative and visual strategies to support learner engagement and understanding. These practices demonstrate an awareness of learner diversity and the importance of adapting teaching to accommodate different intelligences.

The study also found that the consistent application of MI-informed methodologies is influenced by contextual constraints such as overcrowded classrooms, limited teaching resources, language diversity, and heavy curriculum demands. The study therefore contributes to MI theory by showing that its successful implementation depends not only on understanding the theory, but also on the availability of contextual and institutional support. As a result, educators often implement these approaches responsively rather than through systematic planning. Although educators recognise the value of MI in supporting GA learners, practical challenges within disadvantaged schooling environments shape how these methodologies are enacted in everyday classroom practice.

5.6. LIMITATIONS OF THE STUDY

Although this study contributes valuable insights into the implementation of Gardner's (1983; 1999) MI theory in schools within the Umlazi District, it is not without limitations. The study was conducted with a relatively small, purposively-selected sample of Grade Seven educators, which limits the extent to which the findings can be generalised to educators in other districts, school contexts, or grade levels.

In addition, the study relied partly on educators' self-reported experiences obtained through interviews. While these accounts provided rich qualitative data, they may have been influenced by social desirability or reporting bias, as participants may have portrayed their instructional practices in a more favourable manner. Although classroom observations were used to enhance credibility, my presence may have influenced educator behaviour during observed lessons.

The study was conducted over a relatively short time frame, which limited the ability to capture long-term instructional practices, sustained implementation of MI-informed teaching methodologies, and changes in educator practices over time. As a result, the findings reflect educators' experiences at a specific point in time rather than across extended teaching cycles.

Furthermore, the study focused primarily on educators' perspectives and did not include direct input from learners or School Management Teams (SMTs). The inclusion of learner voices or leadership perspectives may have provided a more comprehensive understanding of how MI-based teaching is experienced and supported at different levels within the school system.

Lastly, contextual constraints such as overcrowded classrooms, limited resources, and curriculum demands—while central to the findings—may have shaped educators' practices in ways that are unique to under-resourced schools. These contextual factors should be considered when interpreting the findings and applying them to other educational settings.

5.7. RECOMMENDATIONS

Based on the findings of this study, several recommendations are proposed to strengthen the implementation of MI-informed teaching methodologies for GA learners within disadvantaged schooling contexts such as those in the Umlazi District. The recommendations lie within participants' experiences, classroom observations, and the challenges identified in relation to overcrowding, limited resources, language diversity, and the need for practical professional support.

5.7.1. Recommendations for educators in classroom practice

The findings revealed that educators are aware of the learner diversity they are exposed to and attempt to vary their teaching methodologies; accordingly, however, implementation of MI-informed methodologies remains inconsistent due to classroom pressures such as large class sizes, limited resources, and time constraints. These recommendations respond directly to findings in Theme 1 and Theme 2, where educators showed awareness of MI but struggled with consistent implementation due to classroom constraints. There is therefore a need for more intentional and structured integration of MI-informed approaches into everyday classroom practice.

To strengthen classroom implementation:

- Educators should incorporate cooperative learning strategies to support interpersonal intelligence and peer-assisted learning, particularly in linguistically diverse classrooms where learners benefit from collaborative engagement.

- Visual aids, demonstrations, and graphic organisers should be used more consistently to support spatial intelligence and improve comprehension among learners experiencing language barriers.
- Hands-on and movement-based activities should be integrated into lessons to engage bodily-kinaesthetic learners and improve participation, especially in subjects that learners perceive as abstract.
- Opportunities for learner choice, reflection, and independent exploration should be created to support intrapersonal intelligence and promote learner agency.
- Educators should continue to utilise low-cost and improvised teaching resources, as observed in several classrooms, to sustain MI-informed instruction in resource-constrained environments.

Such practices may enhance learner engagement, participation, and conceptual understanding while remaining aligned with curriculum expectations.

5.7.2. Recommendations for School Management Teams

The study found that educators often rely on personal initiative rather than structured support from school managers when attempting to implement learner-centred and MI-informed methodologies. This recommendation is informed by findings in Theme 3, which highlighted a lack of structured support for educators. This highlights the important role of SMTs in enabling sustained instructional improvement.

School Management Teams should:

- Facilitate professional learning communities where educators can share strategies and collaboratively develop MI-aligned teaching practices relevant to their contexts.
- Provide structured opportunities for peer observation and mentoring to strengthen reflective practice and instructional development.
- Prioritise the procurement and equitable distribution of essential teaching resources, particularly visual and hands-on materials.
- Advocate for classroom support mechanisms, such as educator assistants where possible, to support differentiated instruction in overcrowded classrooms.

- Promote a school culture that values collaboration, innovation, and learner-centred teaching.

5.7.3. Recommendations for professional development

The findings from the study indicate a need for assistance and professional development focused on the practical application of MI-informed teaching methodologies. This directly addresses findings which showed gaps in training and limited practical support for MI implementation. Participants expressed limited access to training that supports implementation rather than theoretical understanding.

Professional development initiatives should:

- Provide practical training on classroom application of MI theory.
- Model adaptable and low-cost methodologies suitable for under-resourced school environments.
- Focus on differentiated instruction, classroom management in diverse settings, and learner engagement strategies.
- Offer subject-specific support, particularly in language and mathematics instruction.
- Be ongoing and supported by mentoring and reflective practice opportunities.

Professional learning should therefore move beyond once-off workshops towards continuous development that supports long-term instructional change.

5.7.4. Recommendations for the Department of Education

Systemic support remains critical for the sustainable implementation of MI-informed methodologies in disadvantaged contexts. These recommendations respond to systemic challenges identified in the findings, particularly overcrowding and limited resources. The findings suggest that structural challenges such as overcrowding, limited resources, and uneven access to professional development significantly influence classroom practice.

The Department of Education should:

- Provide clearer guidance on differentiated and learner-centred teaching approaches.
- Offer targeted professional development for educators in under-resourced schools.
- Improve access to teaching and learning resources.
- Address structural constraints such as overcrowded classrooms through resource allocation and staffing support.
- Encourage curriculum approaches that support holistic learner development.

5.7.5. Recommendations for teacher education institutions

Initiating educator education programmes should better prepare upcoming educators to teach in diverse, under-resourced contexts similar to those identified in this study.

Universities and colleges offering educational qualifications should:

- Emphasise the practical application of MI theory.
- Prepare educators for multilingual and socio-economically diverse classrooms.
- Include training in collaborative learning, inquiry-based instruction, and multimodal teaching approaches.
- Provide experiential learning opportunities in disadvantaged school contexts.

5.7.6. Recommendations for future research and practice

The findings of this study highlight the need for continued research into the implementation of MI-informed teaching in South African classrooms, particularly within disadvantaged contexts. Further studies are necessary to explore how such approaches can be implemented in sustainable and contextually relevant ways, taking into account realities such as overcrowded classrooms, language diversity, and limited resources. There is also a need for closer collaboration among schools, district officials, and higher education institutions to support the development of practical and context-responsive teaching methodologies for GA learners.

From a practical perspective, it is recommended that professional development initiatives place greater emphasis on supporting educators in applying MI in their everyday classroom practice. Educators require ongoing, hands-on support and

training that moves beyond theory and focuses on practical strategies that can be implemented within resource-constrained environments. Strengthening support systems at school and district levels may further assist educators in responding more effectively to diverse learner needs through differentiated and learner-centred methodologies.

Future research could also explore the long-term impact of MI-based teaching on the academic progress and engagement of learners from disadvantaged backgrounds. In addition, further studies could investigate the role of parental involvement and community participation in supporting the learning and development of GA learners, particularly in contexts where schools function as key support structures within the community.

5.8. CONCLUSION

This study concludes that Gardner's Theory of MI provides a meaningful lens for understanding and strengthening teaching and learning in disadvantaged contexts such as in primary schools in the Umlazi District in KwaZulu-Natal. While educators operate within significant systemic constraints, the findings highlight how MI-informed teaching methodologies can support more inclusive, engaging, and learner-centred classroom practices.

Although this study does not propose a new model or framework, it makes valuable contributions by deepening theoretical understanding of how MI theory can be applied in real classroom contexts and by highlighting the practical realities that shape its implementation. The findings emphasise the importance of supporting educators via contextually relevant professional development, adequate resources, and institutional support to enable more responsive teaching practices. However, the study also highlights that the effectiveness of MI is dependent on contextual support, suggesting that theory alone is not sufficient without structural and institutional alignment.

In this way, the study contributes to both theory and practice by demonstrating how MI-informed teaching can be meaningfully applied within disadvantaged schooling environments. It highlights the contextual and institutional conditions necessary for the successful implementation of MI-based teaching, particularly in supporting the diverse learning needs of Generation Alpha learners. The findings therefore emphasise the importance of responsive pedagogy, ongoing professional development, and

supportive school contexts in enabling educators to implement teaching methodologies that recognise learner diversity and promote inclusive classroom practice.

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APPENDIX A: ETHICAL CLEARANCE CERTIFICATE

UNISA university of south africa

UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 12 August 2024

Ref: **2024/08/12/000000110/03/RB**
Name: **Ms Lavanya Rabillal**
Student No.: **61715581**

Decision: Ethics Approval form

Dear **Ms Lavanya Rabillal**

Researcher(s): Name: **Ms Lavanya Rabillal**
E-mail address: 61715581@mylife.unisa.ac.za
Telephone: **0825233108**

Supervisor (s): Name: **Dr DC Lees**
E-mail address: **leesdc@unisa.ac.za**
Telephone: **0609865888**

Title of research: Implementing Appropriate Teaching Methodologies to Enhance Instruction for Disadvantaged Generation Alpha Learners in Umlazi Primary Schools.

Qualification: MEd (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 **2024/08/12** to **2027/08/12**.

*The **write risk level** application was reviewed by the Ethics Review Committee on **12 August 2024** 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 **2027/08/12.** Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number **2024/08/12/00000110/03/RB** *should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,

Prof RB Monyai
Acting Head: CEDU Research
monyarb@unisa.ac.za

Prof Mpine Makoe
Executive Dean: CEDU
gakisme@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 TO CONDUCT RESEARCH

KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

72 STALWART SIMELANE STREET
MALGATE BUILDING
DURBAN
Tel: 031 368 1952 Cell: 078 663 9077
Email: hyacinthngema@gmail.com

30 October 2024

APPLICATION FOR PERMISSION TO CONDUCT RESEARCH IN SCHOOLS IN UMLAZI DISTRICT

1. Permission is hereby granted you ro conduct research in the Umlazi District as requested.
2. The process of researching should at no stages, disrupt the normal teaching and learning time.
3. Wishing you all the best.

Thanking you.

Mrs BN Mahlambi
Umlazi District Director

Date: 30 October 2024

APPENDIX C: PARTICIPANT CONSENT INFORMATION

Title: **EXPLORING GENERATION ALPHA MIS FOR IMPROVED CLASSROOM LEARNING IN THE UMLAZI DISTRICT: EDUCATOR EXPERIENCES**

DEAR PROSPECTIVE PARTICIPANT

I, LAVANYA RABILALL, am conducting research under the supervision of DR LEES, a Senior Lecturer in the Department of Curriculum and Instructional Studies, towards a Master of Education at the University of South Africa. We are inviting you to participate in a study entitled **EXPLORING GENERATION ALPHA MIS FOR IMPROVED CLASSROOM LEARNING IN THE UMLAZI DISTRICT: EDUCATOR EXPERIENCES.**

WHAT IS THE PURPOSE OF THE STUDY?

The aim of the study is to the study aims to explore how Grade 7 educators implement appropriate teaching methods to enhance disadvantaged learners' learning in the Umlazi District.

WHY BEING AM I INVITED TO PARTICIPATE?

You are invited to participate in this study because of your valuable expertise and experience as an educator. Your insights into teaching methods and their effectiveness are essential for the study's research objectives. I obtained your contact details firstly though obtaining permission from the Umlazi District Circuit office to meet with your school principal and thereafter, ensuring compliance with the Protection of Personal Information Act, no 4 of 2013. Approximately 12 participants will be involved in this study, ensuring a diverse range of educator experiences and perspectives while maintaining confidentiality. Your participation is crucial in contributing to a comprehensive understanding of the different methodologies used when teaching grade Seven learners.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

Your role in the study involves participating in semi-structured, open-ended interviews and classroom observations.

The interviews will delve into your experiences and perspectives regarding teaching methods used to present lessons to disadvantaged GA learners. The interview questions will cover topics such as the methods used in presenting lessons, perceptions of their impact on learning, adaptability to different generations of learners, and potential improvements. Each interview is expected to last approximately 60-90 minutes. Additionally, you will be asked to provide basic demographic information and background details relevant to your teaching experience. Your contribution through these interviews is invaluable in enriching the research findings and informing educational practices.

The direct observations for this study will explore the teaching methodologies that is used when you present the subject matter that you teach. During the observation sessions, I will examine various aspects of your teaching, including the techniques you use to present lessons, your views on their impact on student learning, how you adapt to different generations of learners, and possible improvements. I will observe at least two of your grade Seven teaching periods.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is entirely voluntary, and you are not obligated to consent to participation. If you choose to take part, you will receive this information sheet for your reference and will be asked to sign a written consent form. You have the freedom to withdraw from the study at any time and without providing a reason. However, it is important to note that if you have already submitted identifiable material, such as responses to interview questions, it may not be possible to withdraw once submitted. Please be assured that all personal data will be handled confidentially and in accordance with applicable data protection regulations. Your decision to participate or withdraw will not impact your relationship with the researcher or any associated entities.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

Participating in this study offers educators the opportunity to reflect on their teaching practices, gain insights into effective methodologies, and contribute to the

advancement of educational research. By sharing their experiences and perspectives, educators can potentially enhance their own professional development and refine their instructional approaches. Furthermore, their input may directly inform the development of tailored pedagogical strategies aimed at optimizing student learning experiences.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

Potential inconvenience or discomfort for participants in this study may include the time commitment required for interviews, potential emotional discomfort from reflecting on teaching experiences, concerns about privacy and confidentiality, and the possibility of social or professional repercussions if their participation becomes known. To mitigate these risks, measures will be taken to ensure confidentiality, obtain informed consent, protect privacy, and provide access to support resources. Participants will be informed about available indemnity and/or insurance coverage, if applicable, to protect them from harm or injury attributable to the study.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this study Your answers will be given a code number, or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Participants are informed that their anonymous data may be utilized for various purposes, including research reports, journal articles, and conference proceedings. Privacy will be safeguarded in any publication, ensuring that individual participants

remain unidentifiable; however, absolute confidentiality or anonymity cannot be guaranteed, particularly in instances such as observations discussions.

Participants are informed that their anonymous data may be utilized for various purposes, including research reports, journal articles, and conference proceedings. Privacy will be safeguarded in any publication, ensuring that individual participants remain unidentifiable; however, absolute confidentiality or anonymity cannot be guaranteed, particularly in instances such as focus group discussions.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Information will be securely destroyed, if necessary, with hard copies shredded and electronic copies permanently deleted from the hard drive of the computer using relevant software programs. Additionally, any other forms of data storage, such as external drives or cloud storage, will be securely wiped or destroyed in compliance with data protection protocols.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

No payment or reward will be offered to participants for their involvement in this study. Additionally, participants will not incur any costs associated with their participation. This decision is made to uphold the principle of fair procedures, ensuring that all participants are treated equitably and that their involvement is based solely on their willingness to contribute to the research objectives.

HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of the, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

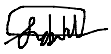
HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Lavanya Rabilall on 0825233108 or email 61715571@mylife.unisa.ac.za . The findings are accessible for the first year after the study is published.

Should you have concerns about the way in which the research has been conducted, you may contact Dr Lees at leesdc@unisa.ac.za

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.



_____

Lavanya Rabilall

APPENDIX D: PARTICIPANT CONSENT FORM FOR SIGNATURE

I, _____ (participant name), confirm that the person asking my consent to take part in this study has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the voice recordings of the _____ (interviews and observations)
I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print)
_____

_____ _____

Participant Signature Date

Researcher's Name & Surname (please print) _____

_____

_____

Researcher's signature Date

APPENDIX E: INTERVIEW FORMAT

SECTION A: BIOGRAPHICAL INFORMATION OF PARTICIPANTS

Form to be filled in by the researcher on behalf of the participant before the interview commences:

Information required	Participant information
Date of interview	
Name of participant (Optional)	
Gender	
Age	
Highest qualification	
Total number of years of educator experience	
Grade and subjects taught by the educator	
Number of years taught at current school	
Allocated pseudonym	

SECTION B: INFORMATION TO BE SHARED WITH PARTICIPANTS

a) The purpose of this study is to explore how Grade Seven educators implement appropriate teaching methods to enhance disadvantaged learners' learning in the Umlazi District.

b) This interview, as well as the others collected for this study, will be the data generation method for the study in question along with classroom observations of your teaching. The interviews will be audio-taped and transcribed for data analysis. You will be given a transcript of your data for approval before it is included in the write up of the research.

c) Your participation in this study is completely voluntary.

d) The signing of a consent form is necessary before commencement of the interview. You may withdraw from the interview at any given time. The interview is confidential, and a pseudonym will be used instead of your real name. You will be offered a transcript copy once it has been typed to validate the content. Additionally, you will be provided with an electronic copy of my thesis once the study is approved and final.

e) The interview will be 1 – 1 ½ hours in duration.

f) Have the participant read and sign the consent form.

APPENDIX F: INTERVIEW QUESTIONS

SECTION C: INTERVIEW QUESTIONS:

1. Please introduce yourself and tell me anything that you are happy to share about your classroom experiences as a Grade Seven educator.
2. How would you define teaching methodology?
3. Could you describe the type of learners that you have in your classroom and what their preferred way of learning is?
4. Can you list all the teaching methodologies that you employ when teaching your grade Seven learners?
5. Describe how you determine and use different teaching methodologies for different purposes when teaching your Grade Seven learners.
6. What teaching methodology do you prefer? Please describe this methodology in detail and explain why it is your preferred method.
7. Have you experienced any challenges with specific methodologies when teaching your Grade Seven learners?
8. Since you started teaching what professional development opportunities related to teaching methodologies have you been exposed to?
9. Is there anything else that you would like to add to our conversation about teaching methodologies?

APPENDIX G: OBSERVATION SCHEDULE

Title of research: **EXPLORING GENERATION ALPHA MIS FOR IMPROVED CLASSROOM LEARNING IN THE UMLAZI DISTRICT: EDUCATOR EXPERIENCES**

The observation will take place in the classroom, at each respective school, with an individual educator. Each observation will continue from the beginning to the end of the scheduled teaching period. Any information identifying the participants will not be recorded.

Plan: Observe each educator during their class teaching period.

Schedule: Observations will occur during the educators' periods according to the school timetable.

Tools: field notes taken with pen and paper.

Date: _____

Name of educator (pseudonym): _____

School : _____

Checklist: Teaching methodologies used/ observed during the lesson.

Teaching Methodology	Description of Methodology	Used/not used (Tick or cross)	Notes
Lecture	Educator-centred instruction where information is		

	presented verbally to the class.		
Discussion	Interactive exchange of ideas among learners and educator.		
Group Work	Learners work collaboratively on tasks or projects.		
Hands-on Activities	Learning through doing, involving physical activity.		
Project-Based Learning	Learners engage in a project over an extended period to explore and learn about a subject.		
Inquiry-Based Learning	Learners engage in a project over an extended period to explore and learn about a subject.		
Differentiated Instruction	Tailoring teaching to meet the individual needs of learners.		
Flipped Classroom	Learners study content at home and engage in		

	interactive activities in class.		
Direct Instruction	Structured, explicit teaching with clear, step-by-step instruction.		
Blended Learning	Combining online digital media with traditional classroom methods.		
Peer Teaching	Learners teaching each other under educator guidance.		
Problem-Based Learning	Learners learn through solving open-ended problems.		
Role Play/Simulation	Learners act out roles or scenarios to understand concepts.		
Technology-Enhanced Learning	Use of digital tools and resources to support learning.		
Scaffolding	Providing temporary support to help		

	students achieve learning goals.		

Checklist: MI used in the lesson.

Category	Information	Tick/cross
Linguistic Intelligence	Sensitivity to spoken and written language.	
Logical-Mathematical Intelligence	Ability to analyse problems logically, conduct mathematical operations.	
Spatial Intelligence	Capacity to think in images and pictures.	
Bodily-Kinaesthetic Intelligence	Using one's physical body skilfully.	
Musical Intelligence	Ability to produce and appreciate rhythm, pitch, and melody.	
Interpersonal Intelligence	Capacity to understand and interact effectively with others.	

Intrapersonal Intelligence	Ability to understand oneself, including one's feelings and motivations.	
Naturalistic Intelligence	Ability to identify and classify patterns in nature	

General Observation Notes

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

General Observations made on:

1. Teaching Methodologies Observed:

Description of the methodologies used.

_____
_____
_____
_____

2. MIs Addressed:

Description of how the lesson catered to different intelligences and examples observed.

_____
_____
_____
_____

3. Learner Engagement and Response:

Notes on learner participation, engagement levels, and reactions.

_____
_____
_____
_____

This checklist will be used during classroom observations to systematically record and assess the use of various teaching methodologies and how they cater to MIs. Observations will help identify best practices and areas for improvement to enhance instruction for disadvantaged Generation Alpha learners in Umlazi Primary Schools.

APPENDIX H: TRANSCRIPTION OF INTERVIEW

INTERVIEW TRANSCRIPT FOR PARTICIPANT 1: FACE-TO-FACE

TITLE OF THESIS : EXPLORING GENERATION ALPHA MIS FOR IMPROVED CLASSROOM LEARNING IN THE UMLAZI DISTRICT: EDUCATOR EXPERIENCES

DATE OF AUDIO : 23 November 2024

LENGTH OF AUDIO : 22: 13

TRANSCRIPTION LEGEND : RESEARCHER

: Participant 8 (P8)

Interview Responses

Interview question 1- Please introduce yourself and tell me anything that you are happy to share about your classroom experiences as a Grade Seven educator.

I'm a Grade 7 educator with a passion for Mathematics, Natural Science, and Life Orientation. These subjects help me connect what we learn in class to real-life situations, which helps spark curiosity and makes learning practical for my students. I use interactive activities like science experiments, problem-solving in math, and group discussions in Life Orientation to keep my learners engaged. Teaching in a classroom with diverse learners has taught me to adjust my methods to suit different learning needs.

Interview question 2- How would you define teaching methodology?

Teaching methodology is the way educators approach and use strategies to deliver lessons so that all students can understand and learn effectively. It includes the methods we use to explain ideas, involve students, and achieve learning goals, all while considering the subject and the classroom environment.

Interview question 3- Could you describe the type of learners that you have in your classroom and what their preferred way of learning is?

My learners are very different in how they learn. In Mathematics, most of them like logical problem-solving tasks and visual aids like diagrams and graphs. In Natural Science, they enjoy hands-on experiments and demonstrations that make complicated ideas easier to understand. For Life Orientation, discussions, role-playing, and multimedia tools work well because they make the lessons more relatable. Using technology and interactive tools also helps keep all my learners engaged.

Interview question 4- Can you list all the teaching methodologies that you employ when teaching your Grade Seven learners?

I use a mix of teaching methods in my classroom. These include direct instruction for teaching basic skills step by step, especially in Mathematics; inquiry-based learning that encourages curiosity and exploration, particularly in Natural Science; and collaborative learning, where students work in groups on projects and activities, especially for teamwork and decision-making topics.

Interview question 5- Describe how you determine and use different teaching methodologies for different purposes when teaching your Grade Seven learners.

I choose my teaching methods based on the subject and what I want the students to learn. For example, in Mathematics, I use direct instruction to explain new formulas and inquiry-based methods to tackle complex problems. In Natural Science, I focus on hands-on experiments to explain ideas like chemical reactions and the water cycle. For Life Orientation, I use discussions, case studies, and role-playing to teach real-life topics like decision-making and conflict resolution. I also use assessments during lessons to check how well the students understand and adjust my approach if needed.

Interview question 6- What teaching methodology do you prefer? Please describe this methodology in detail and explain why it is your preferred method

I prefer experiential learning for Natural Science and inquiry-based learning for Mathematics because they make learning more engaging and meaningful. For example, in Natural Science, my learners do experiments like testing the pH of liquids or building circuits, which help them understand difficult ideas better. In Mathematics, inquiry-based tasks like finding patterns or solving real-life problems encourage critical thinking. For Life Orientation, I like discussion-based learning because it helps

students express themselves, see different viewpoints, and build social and emotional skills.

Interview question 7- Have you experienced any challenges with specific methodologies when teaching your Grade Seven learners?

Yes, there are challenges with some methods. In Mathematics, some students struggle with inquiry-based tasks because they lack strong basic skills, so I must give them extra support. In Natural Science, limited resources can make it hard to do experiments. In Life Orientation, shy students sometimes don't participate in discussions, but using tools like anonymous question boxes or working in smaller groups helps. Managing time and staying on track with the curriculum while using interactive methods is always a challenge.

Interview question 8- Since you started teaching what professional development opportunities related to teaching methodologies have you been exposed to?

I've attended workshops on teaching methods for STEM subjects, which focused on inquiry-based and hands-on learning. These sessions gave me ideas on how to make problem-solving and science more engaging. I've also been part of professional learning committees (PLCs) for Mathematics and Natural Science, where we discussed differentiated teaching and using digital tools like apps. I've attended coding and robotics workshops that helped me bring more technology into my lessons.

Interview question 9- Is there anything else that you would like to add to our conversation about teaching methodologies?

I think teaching methods should keep changing to meet the needs of today's learners. Using technology, encouraging teamwork, and making lessons practical and relevant are important for keeping students interested. Letting students have a say in their learning, like choosing projects or suggesting topics, can also make them more motivated and excited about learning.