THE AFFORDANCES AND CONSTRAINTS TO INCLUSIVE TEACHING IN FOUR SOUTH AFRICAN SCHOOLS: A CULTURAL HISTORICAL ACTIVITY THEORY PERSPECTIVE

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ABSTRACT

South Africa has experienced teacher education and system reform initiatives in line with a mandate that promotes the ideas of inclusive education. Despite this, learners with different learning needs remain at risk of not accessing equitable learning opportunities. The extant literature points to various reasons why inclusive teaching remains constrained within South African school environments. However, there is little evidence of research that considers the systemic relationships between the various interacting components within schools and with other systems in society, and how these might influence research findings. This study uses Cultural Historical Activity Theory (CHAT) as a theoretical framework to explore why teachers are enabled or constrained from implementing inclusive teaching strategies in South African schools. A qualitative study was undertaken in four schools in a South African city. At each school, data was gathered by conducting semi-structured interviews with teachers and school principals and by observing lessons. These data were analysed and emerging themes were considered through the perspective of the Five Basic Principles of CHAT and the associated theoretical tools of relational agency and relational engagement.

Constraints to inclusive teaching include tensions between the teachers and other components in the school system and beyond, such as the external national curriculum; tensions intrinsic to teachers as a result of their under-preparedness for inclusive teaching, negative attitudes and low self-efficacy for teaching learners with different learning needs. Teachers are confused about what constitutes inclusive teaching and find it difficult to distinguish it from special needs education. Enabling inclusive teaching requires a positive orientation of school principals towards the ideas of inclusive teaching and leadership actions in support of this. Implementing inclusive teaching strategies is further enabled by collaboration between teachers, through active engagement, despite teaching in school systems where multiple systemic factors acted against them. The findings are significant in that they reveal opportunities for further research that considers the hidden, historical motives existing within and between the components in a school system and how these enable or constrain inclusive teaching. Furthermore, the findings show that in order for the ideas of inclusive teaching to gain traction in a school system these ideas need to overcome systemic contradictions and transform an existing *object-of-activity* that is not supportive of inclusion.

Keywords: Inclusive teaching, Inclusive education, Cultural Historical Activity Theory, Object-of-activity, First and second generation activity systems, Knotworking, Contradiction, Historicity

DECLARATION

I declare that this thesis is my own unaided work. It is being submitted for the degree of Doctor of Philosophy at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination at any other University.

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Date:

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LIST OF ACRONYMS

ADHD	Attention Deficit Hyperactivity Disorder
CAPS	Curriculum Assessment Policy Standards
CHAT	Cultural Historical Activity Theory
DET	Department of Education and Training
DBE	Department of Basic Education
DoE	Department of Education
DBST	District Based Support Teams
FSS	Full-Service Schools
GEMR	Global Education Monitoring Report
IEB	Independent Education Board
ILBST	Institution Level Based Support Teams
NWP6	National White Paper Six
SAIS	South African Policy on Screening, Identification, Assessment and Support
SGB	School Governing Body
TED	Transvaal Education Department
UDL	Universal Design of Learning
UN	United Nations
UNESCO	United Nations Educational Scientific and Cultural Organisation
UNICRPD	United Nations International Convention on the Rights of Persons with Disabilities

CHAPTER 1

INTRODUCTION TO THE RESEARCH STUDY

> Basic Education Minister, Angie Motshekga, reported that there were 725 public schools which accept pupils with disabilities. That is less than three percent of schools countrywide. Provincial Manager for Disabled People in South Africa, Mncedisi Nkota, said: "We have a serious crisis. The Department [of education] talks of inclusive education, which we promote, but the reality is that the department is not ready. It is something that we have been talking about for more than fifteen years" (Ntongana. 2017, October 10).

1.1 The historical context that frames this study

The extant literature shows that learners who have different learning needs are at risk of not accessing equitable education opportunities in South African schools. This is despite teacher education and system reform initiatives towards more inclusive education (Andrews, Walton & Osman 2019). In this section, local and international policy directives for inclusive teaching are briefly discussed in relation to the South African context.

Historically, education in South Africa mostly involved the segregation of children according to their disabilities, as they were seen to be somewhat different to the norm and thus perceived as incapable of benefitting from mainstream education. Early influencers around the world began to find a voice over fifty years ago which led to the genesis of the concepts and ideas of inclusive education. Scholars (Winter & O'Raw, 2010, p. 5) explain that in the 1960's "political pressure" and social awareness from "disability and parental advocacy groups began to change society's values," which ultimately called for legislative reforms in education. This emerging political and social awareness culminated in international legislation that categorically enshrined the rights of all children to an inclusive education recognising all children as equal, regardless of their different learning needs. These influences ultimately pushed the ideas of inclusive education onto a global stage with the formation of the Salamanca Statement (UNESCO, 1994). The Salamanca Statement and Framework for Action (UNESCO, 1994) is

historically an important piece of documentation for inclusive education and reaffirms every person's basic right to education regardless of intellectual, physical, emotional or linguistic differences. The Salamanca Statement also declares that people with special needs should have access to regular schools and be accommodated with a 'child-centred' pedagogy capable of meeting these needs (UNESCO, 1994).

The Salamanca Statement and Framework for Action (UNESCO, 1994) was inspired by other international documents that included the UN Convention of the Rights of the Child (UN, 1989) and the United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities (United Nations (UN), 1993). The Salamanca Statement subsequently contributed to the Dakar Framework for Action (UNESCO, 2000). The increasing international recognition for the ideas of inclusive teaching, and the resultant call for change, began to influence education policy and actions at the grassroots level and school level in countries around the world. For example, The United Nations International Convention on the Rights of Persons with Disabilities (UNICRPD, 2006) places the responsibility for education with governments, to ensure that children with barriers to learning are not excluded from mainstream education and can access education on an equal basis as their peers. This document also describes how education support must be located within mainstream schools to "facilitate effective teaching" and learning (UNICRPD, 2006, Art.24). Winter and O'Raw (2010, p. 10) state that one of the main arguments in support of inclusive education "is that any exclusionary practices are morally unacceptable. It is argued that exclusion in any form may have damaging effects on individuals and groups within society."

The Education 2030 Framework for Action, recently adopted by the global education community, emphasises the need to address all types of exclusion and marginalisation (UNESCO, 2017). The Education 2030 Framework for Action specifically calls for efforts to enable education systems to educate and serve all learners, "with a focus on those who have traditionally been excluded from educational opportunities, such as students from the poorest households, ethnic and linguistic minorities, indigenous people, and persons with disabilities" (Ainscow & Messiou, 2018, p. 2).

Schools in South Africa have a constitutionally derived mandate to implement the policies and ideas of inclusive education to allow access to education for all learners regardless of their different learning needs. It is therefore expected under these policy directives that schools are places of work that are conducive to the ideas of inclusive teaching. To achieve this mandate

various educational policy documents have provided a road-map for how inclusive teaching in South Africa is to be achieved. The most influential document in South Africa, created with this goal in mind, is the National White Paper 6: Special Needs Education; Building an Inclusive Education and Training System (Department of Education (DoE, now DBE), 2001) (WP6) which outlined a national strategy that set out to achieve an inclusive education system focussing on addressing and accommodating learners who experience various barriers to learning (Engelbrecht, Nel, Nel & Tlale, 2015). The WP6 policy directives set out to outline an inclusive education and training system for schools and teacher education. Two stated goals of the WP6 policy are to:

> Systematically move away from using segregation according to categories of disabilities as an organising principle for institutions (National White Paper 6: p. 10).
>
> Introduce strategies and interventions that will assist educators to cope with a diversity of learning and teaching needs to ensure that transitory learning difficulties are ameliorated (National White Paper 6, p. 10).

Furthermore, the WP6 directs the implementation of inclusive education in the education system based on the following aims and objectives: an acknowledgement that all children are capable of learning, an acceptance that all children are unique, have different individual learning needs and deserve an ordinary part of the human experience; and an understanding that all role-players need to strive towards enabling all education systems, learning structures and pedagogical methodologies to meet the needs of all learners (DoE, 2001, p. 6). The WP6 also advocated for a change in how special needs and disability be understood within the South African education context. Subsequently, the term 'barriers to learning' became the preferred terminology instead of the alternative of 'special needs.' The difference being that the term 'special needs' signifies some type of deficit residing within the learner while a 'barrier to learning' implies that there may be any number of impediments not necessarily intrinsic to the learner. These impediments to accessing education and learning could include poverty, trauma, second language learners and other societal factors, while not discounting traditional views of disability (Walton, 2012).

1.2 The problem statement

It is evident that many schools in South Africa continue to provide education without consideration of the range of different learning needs facing learners in the classroom and the

challenge of responding to these differences. In these schools, learners continue to experience substantial educational inequality despite efforts to include all learners by individual teachers (Engelbrecht, Nel, Smit & van Deventer, 2016).

Despite the policy directives of the WP6 advocating for the implementation of inclusive education in South African schools, traction of these policy directives has been slow. For example, scholars (Geldenhuys & Wevers, 2013; Nel, Engelbrecht, Nel & Tlale, 2014) argue that despite the practice of inclusive education being embraced as a model for education, its instructional practices have not translated into reality in South African classrooms. What has emerged from the literature is a complex array of reasons that account for this slow traction of inclusive teaching.

Some researchers (Geldenhuys & Wevers, 2013; Nel, Tlale, Engelbrecht & Nel, 2016; Engelbrecht, Nel, Nel & Tlale, 2015) describe the problem as being the misalignment between the directives of the national curriculum and the ideas of inclusive education as outlined in the WP6. These scholars argue that where there are contradictions between the outcomes of two directives the resultant confusion negatively impacts on the traction of inclusive education. Engelbrecht, Nel, Nel and Tlale (2015, p. 3) conclude that "although recent curriculum transformation has integrated the principle of inclusive education, which by implication means that curriculum implementation should be flexible with regard to teaching methods, assessment, pace of teaching and the development of learning material (DoE, 2001), the current Curriculum and Assessment Policy Statements (CAPS) do not support the requirements of a flexible curriculum as stated in Education White Paper 6." These scholars argue that this factor limits the extent to which teachers can teach inclusively as they are constrained by the pressure to conform to external directives.

For other researchers (Kenworthy & Whittaker, 2000; Soudien & Sayed, 2004; Wildeman & Nomdo, 2007) the central concern that accounts for the lack of traction of inclusive teaching rests with the disparity between and uneven distribution of available resources to schools in South Africa and the socio-economic challenges created by uneven wealth distribution.

Another perennial focal point of the literature is the issue of negative teacher attitudes towards inclusive teaching as a direct result of teachers having low self-belief in their ability to teach inclusively. It is argued in the literature that feelings of low-self-esteem stem from inadequate pre-service and in-service teacher education in preparation for inclusive teaching resulting in in-service teachers being underprepared for the challenges of teaching learners with a wide

range of different learning needs (Engelbrecht, Oswald, Swart & Eloff, 2003; Ekins, Savolainen & Engelbrecht, 2016; Engelbrecht, Green, Naicker & Engelbrecht, 1999; Engelbrecht, Oswald, Swart, Kitching & Eloff, 2005; Hay, Smit & Paulsen, 2001). Teacher education has also received attention, with scholars (Walton, Nel, Muller & Lebeloane, 2014) arguing that the content of teacher education courses is inadequate to prepare teachers for the challenges of inclusive teaching. Teacher education programmes are criticised for being disjointed, too theoretically orientated, fragmented, and focusing on a deficit-orientated approach to learning difficulties (Engelbrecht, 2013; Oswald, 2006). Also, scholars (Engelbrecht et al., 2015) conclude that the way in which teachers understand learner diversity and how to respond to a range of children's learning needs is based on the formative learning they received when becoming teachers themselves. They argue that this pre-service teacher education was based on an individualised deficit approach to learners' needs with the result that teachers created learning opportunities that were not accessible to all learners in the class thus becoming less inclusive.

Also, scholars (Van Rooyen, Le Grange & Newmark, 2002) argue that conflicting ideas between the ideas of inclusive education and special-needs education create confusion and are seen to impact negatively on the implementation of inclusive education. They conclude that issues with directives for inclusive education and the practices of inclusive teaching go beyond concerns related to confusing language and extend to issues of policy implementation. The conclusions of scholars (Van Rooyen, Le Grange & Newmark, 2002) align with the research conclusions of Hardy and Woodcock (2015, p. 141) who criticise inclusive education policies as a "fraught issue" that is synonymous with ambiguous broad statements with little resource commitment and implementation strategy. Furthermore, Engelbrecht, Nel, Nel, and Tlale (2015) explain how the WP6, despite a strongly stated position on the socially constructed nature of learner difference, depends on medical provisions for learners who experience barriers to learning.

Finally, school leadership is identified in the scholarly literature (Shevlin & Rose, 2017) as a critical factor in determining the extent to which inclusive teaching gains traction in schools. Shevlin and Rose (2017) also mention the significant role that the principal can play in creating a teaching environment and developing an internal policy which is either constraining or supportive of inclusive teaching.

What is briefly highlighted from this literature represents a constellation of reasons to suggest why inclusive teaching has not gained traction in many South African schools. From this summary of the extant literature I concluded that much of the scholarly work was focussed on isolated factors forming constraints to inclusive teaching. It was surmised that many of these research initiatives did not extensively consider first, the underlying and often hidden historical influences on the ability for the ideas of inclusive teaching to gain traction and secondly, the dynamics of the interactions and influences of the various components operating in a complex school system. I argue that many of the studies reviewed here were small in scale and involved research that dealt with small groups of individual teachers and learners in schools. Walton and Rusznyak (2014) argue that what is lacking in the research context was a proliferation of large-scale systemic work around contested issues around inclusive teaching. This observation supports the conclusion reached by Florian (2012a, p. 217) who argues that globally there has been little evidence of research that has been rigorous, empirical or "systemic on teacher preparation and continuing professional development for inclusive education." In the next section I contextualise the research problem outlined here in relation to my thesis.

As discussed above, inclusive teaching remains constrained in many South African schools despite significant research investigating these constraints and policy directive implementation aimed at ensuring the traction of the ideas of inclusive education (Engelbrecht, Nel, Smit & Van Deventer, 2016). The findings show that although the constraints to inclusive teaching have been extensively researched over the last thirty years, meeting the challenge of teaching learners with a range of different learning needs still remains problematic or largely unattained. I call for new strategies in researching this problem which looks at the situation of inclusive teaching from a different perspective or lens. This has afforded me the opportunity to explore the constraints to inclusive teaching in new ways in order to move beyond what has already been explored in the literature. In other words, I have taken a well-researched problem and addressed it from a different perspective in an effort to find new answers to questions.

1.3 Research aims and objectives

This thesis is a modest contribution to understanding the complexity of disrupting exclusionary practices in South African schools. The findings of this study are unique as they show a way of systematically identifying the root causes behind the reasons as to why inclusive education continues to slip through the cracks in many schools in South Africa. An aim of this thesis was to examine the extent to which hidden factors within schools afford or constrain inclusive

teaching through the theoretical framework or lens of a systems theory perspective. Since it is established that schools are complex systems (Oswald, 2010) the aim of the study was also to examine systemic influences on inclusive teaching in the school space rather than focus on isolated events or contexts. For example, I consider what might be happening with regards to inclusive teaching in a teacher's classroom while also considering the influences of other components operating within the school that could affect how lessons are taught. An example of this may include the school principal and his/her ideas about teaching and learning and how these influence the actions and decisions that the teacher takes regarding teaching to learners with different learning needs. The first objective of the study was to explore the constraints and affordances to inclusive teaching by examining the contradictions or tensions that manifest within and between the components that exist in schools. These components include the teachers, school-leaders, learners, human and physical resources, policies, the school community and the rules that govern the system that all interact and function together, and thus reciprocally influence the activity of teaching and learning. A second objective was to examine the contradictions beyond the school and look at contradictions between school systems and other systems with a vested interest in education in society that influence components within schools. The final objective was to explore how the motives behind the historical origins of the school system impacted on the affordances and constraints to inclusive teaching. These research objectives were achieved by conducting a qualitative research study in four purposively selected schools in South Africa through the lens of Cultural Historical Activity Theory (CHAT) as a theoretical framework and Engeström's (2000a; 2001) systems models. To achieve these objectives, the following three research questions were posed:

1. What factors constrain teachers from implementing inclusive teaching strategies in South African schools?
2. How can the implementation of inclusive teaching in South African schools be accounted for?
3. How might Cultural Historical Activity Theory inform an understanding of what limits and what enables the implementation of inclusive teaching strategies in South African schools?

1.4 The significance of the research

Recent scholarly literature (Engelbrecht, Nel, Nel & Tlale 2015) indicates that the acceptance of inclusive teaching practice has not translated into a reality in most South African classroom

environments. This observation reflects the findings of earlier research by scholars (Walton, Nel, Hugo & Muller, 2009) who argue that despite pockets of excellence in some schools, notably some independent schools, many institutions across South Africa continue to remain untransformed in that inclusive teaching is not placed at the forefront of education provision. This comparison of similarities between these studies shows that despite nearly a decade's differences in the studies conducted, the matter of inclusive teaching implementation remains a contentious issue in South African schools. I argue that it would be significant to explore the slow uptake and subsequent lack of traction of inclusive teaching in schools from a different lens to gain a unique perspective; notably exploring inclusive teaching from a systems theory perspective informed from a CHAT theoretical framework.

Of further significance was that the results of this research aimed to contribute to the scholarly literature by investigating first-hand experiences of the challenges faced by teachers in different schools in South Africa. This was achieved by examining the lived experiences of teachers and school principals within the context of their school as a complex and interrelated system. Achieving this objective was possible by providing a theoretical and data-driven set of conclusions to this under-researched area in the literature on inclusive education implementation and traction in South African schools. This study provides an opportunity for people who implement policy, which includes teachers and school-leaders, to examine the factors that are both intrinsic and extrinsic to them and which are found within their school working environments as impacting on their ability to teach inclusively. A unique feature of this study was that it afforded me an opportunity to observe teachers grappling with the implementation of inclusive teaching practices at the interface of their contextual teaching environment in their schools. This was in relation to, and consideration of the influence of teachers' pre-service teacher education and teachers' personal dispositions or intrinsic ideas around meeting the challenges of teaching learners with a wide range of different learning needs.

1.5 Overview of the methodology

Fundamental to this research project was that it first aimed to extrapolate findings that represented peoples' authentic interactions in complex school systems to gain an understanding of how factors within peoples' environment impacted on their ability to teach inclusively. Secondly, it was important for me to examine and gain an understanding of how teachers' own intrinsic dispositions impacted on their inclusive teaching and thirdly, where inclusive teaching

was observed in classroom settings, it was my intention to understand where and how teachers had learned their inclusive teaching abilities. To achieve these objectives, it was necessary to utilise qualitative research techniques (McMillan & Schumacher, 2010).

This was an interpretive study, as I set out to understand the meaning the participants attributed to their subjective experiences and the world (Merriam, 2002; Willig, 2008). "Purposive sampling" was used to select four separate and distinct primary schools in South Africa as research sites (Teddlie & Yu 2007, p. 77). These schools represent a variety of schools – affluent independent; faith-based, pro-poor independent; state run schools available in South Africa. Common across all the separate four research sites was that each had been mandated to follow the national curriculum as outlined by the national Department of Education (DoE), in the administration of their teaching and assessment processes.

At each school two/three teachers and the principal participated in multiple semi-structured interviews and lesson observations. These interviews provided me with the qualitative data to apply a contextual lens in each school to identify the factors that afforded or constrained inclusive teaching. At each separate school/research site I explored the constraints and affordances to inclusive teaching by first, conducting one-on-one semi-structured interviews with multiple purposively selected teachers and school principals and secondly, by participating in lesson observations with all the teacher participants. Each teacher and principal was given an opportunity in the semi-structured interviews to openly discuss their personal dispositions towards the ideas of inclusive education, their understandings of what it means to teach inclusively, the extent to which their pre-service education prepared them for inclusive teaching and the extent to which the school they were teaching at either afforded them with the opportunities to teach inclusively or constrained their efforts. The purpose of the multiple lesson observations was to examine authentic 'real-life' teaching situations, where teachers faced the challenge of teaching learners with a wide range of different learning needs.

The resulting interview data was subjected to an inductive data analysis process where the raw data was coded to allow for categories and themes to emerge. These emergent themes and selected quotes from the research participants were then considered through the lens of Engeström's (2001) second and third generation activity systems models to determine the contradictions within or between components in a school that have an influence in either constraining or affording teachers from teaching inclusively. What proved significant was to

explore how one set of actions or practices found to exist in a school system had a direct and transformative influence on all the activities within the system.

An important consideration of the research was for its conception and execution to be a meaningful process for both myself in terms of findings and contributions to the scholarly literature, and the teachers and principals who volunteered as participants. The decision was consciously taken by me to be an active participant in the data collection process and in doing so develop professional working relationships with the volunteer teachers and principals. This approach is supported by some scholars (Edwards 2002; Oswald 2010) who for example, argue that as educational researchers, if we intend to capture the complexities of educational practices and their unique contexts, we need to be close to our research. In further support of a researcher's decision to interact closely, and thus directly, with the research participants, Edwards (2002) argues that a conscious separation of research and practice, knowledge and action, and theory and practice are unnecessary and ultimately unhelpful. Edwards (2002, p. 10) argues that there should "be stronger relationships between the researchers and the practitioners" in the schools where they conduct their research. This engaged approach to the research process, complimented both the research questions and Engeström's (2001) activity systems models that were used as a component of the theoretical framework of CHAT. CHAT in turn was used as a lens for the study. There were multiple reasons to support this approach: first, many of the answers to questions were reliant on a deep understanding of the contextual reality that was unique to each specific school and teaching environment. Secondly, the relationships between the various components that interact within a complex system could be effectively examined with Engeström's (2000a; 2000b) activity systems models and finally, the original needs and often hidden motives that influence the chosen school's current actions and activity can be better understood within the situatedness of its own historical contexts.

1.6 The theoretical framework of the study

For this study the research required a theoretical framework that could explain the complexity of the interactions between multiple components in a constantly transforming and dynamic environment. I selected CHAT as a theoretical framework together with Engeström's (2000a) second and third generation activity systems models to accomplish the research objectives and assist in answering the questions of this study. In other words, this study explored constraints and affordances to inclusive teaching through CHAT inspired activity systems' frameworks or models (Engeström, 1999; Engeström, 2000a; Engeström 2001; Kaptelinin, 2005). Within the

CHAT framework I utilised the five basic principles of CHAT (Engeström, 2011; 2000a), and 'relational agency', and relational engagement (Edwards, 2007, p. 4) as theoretical tools when considering the qualitative findings. Using Engeström's (2001) activity systems models as a template or framework to interpret the emergent themes from the thematic analysis of the data, allowed for the identification of various systemic contradictions within and between components of the school systems. Essentially, the use of Engeström's (2000a; 2001) activity systems models enabled me to explore how teachers were afforded or constrained from teaching inclusively in relation to the tensions or contradictions within and between the components that function within the context of the school system in which they interact.

The nature of the research study fits with Wardekker's (2000) views on the use of CHAT as a theoretical framework: Wardekker proposes that CHAT is essentially a learning theory and postulates the notion that humans, in this case teachers and school principals, are embodied in actual human activities and the communities in which these activities are practiced. This means that teacher activity, which is teaching and its related practices, can be studied within the school environment where a researcher can take into consideration the complex historical, social and contextual factors, unique to each activity system (school), that impacts on such activity (Oswald, 2010). Furthermore, a researcher has to overcome the challenge that teacher learning and their actions (lessons) are not independent of the influence of the complex system and the components of that system in which they engage in the shared activity of teaching. This challenge was addressed by using CHAT as a theoretical framework. In using CHAT, individual and social learning process should always be seen and considered as interdependent entities (Oswald, 2010). Here the interdependent entities constitute the various complex systems that interact with each other in the greater fabric that makes up society and which includes schools and external regulatory bodies with vested interests in the activities of schools.

1.7 Positionality of the researcher

I acknowledge that as a result of biographical positioning (Oswald, 2010) I could never be considered as a truly objective observer, but rather historically and culturally situated, and as a result cannot claim to view the research participants, or the research sites, through an unbiased or objective lens. It was important for me to recognise this and acknowledge that, unconsciously, my own value system, humanness and intuition all influenced the understanding of phenomena external in the world, or in this case, the schools and the participants where the study was being conducted. As a result of this realisation I recognised

that no research process could be value free, and one has to not only grapple with the ethics and politics of research, but also with the lens of his/her own subjective reality (Lincoln & Denzin, 2005). The use of CHAT as my theoretical framework was significant in relation to my role as the researcher, as according to scholars (Engeström, Engeström & Kerosuo, 2003), studies of professional discourse in a complex system acknowledges that the actions of the researcher as a human and thus imperfect participant in the research process also becomes an *object* of data collection and critical analysis.

1.8 Outline of the chapters of this thesis

Chapter 1: Introduction to the research project

The research project is introduced with an account of why it was decided that research into the affordances and constraints to inclusive teaching was a topic that needed further attention in the South African context. The chapter also introduced the reader to the historical context of inclusive education, both on the international and local scene, by considering how these ideas influenced education in South African schools. This chapter also introduces the reader to the central research questions and the theoretical framework of the research project. This is against the backdrop of the significance of investigating a prominent issue from the extant literature from a unique perspective to gain new insights into why inclusive education continues to struggle to gain traction in South African schools. Finally, the chapter gives the reader a brief description of the reasons behind the choice of employing a qualitative research methodology to conduct the study and the choice of CHAT as a theoretical framework through which to interpret the findings. I explain how these are both central to answering the questions of this research. Each of these elements is described in more detail in the applicable chapters of this thesis.

Chapter 2: Literature review – inclusive teaching in South Africa: a contextual historical account

Chapter Two focuses on the extant literature around inclusive teaching in the South African context. In this chapter I coded for discourses or themes that have been perennial in the South African literature over the last thirty years. A key concept explored is how these themes within the inclusive education literature have evolved from research conducted in the early 1990's (at the end of the apartheid era), when compared to research conducted more recently during South

Africa's emergence as a non-racial democracy. These themes are discussed with reference to the changes of focus or direction that have taken place around the topic of inclusive education and inclusive teaching. Integral to the arguments made in this chapter is how the similarities and links between scholarly findings from South Africa that reflect the findings from literature in the international community are explained. The discussions in Chapter Two demonstrate the complexity surrounding the ideas around inclusive education and provides reasons suggesting why inclusive education is constrained in South African schools and for that matter, in many countries around the world. This sets the platform for my argument as to why I consider it necessary to explore inclusive teaching from a unique perspective to find new solutions to existing issues.

Chapter 3: Literature review: the concept of teachers teaching inclusively

Chapter Three contains a review of the South African literature as well as international literature in relation to the conceptual idea of inclusive teaching. This includes a discussion of the idea of what it means for a teacher to teach inclusively in a classroom setting. In other words, I examined what the literature mentioned in terms of how teachers can meet the challenge of teaching learners with a wide range of different learning needs. To focus the broad range of available literature, three dimensions of what the literature constitutes to be inclusive teaching were unpacked. Namely: the orientation of inclusive teaching; inclusive instructional practices and the physical space for teaching inclusively. Chapter Three outlines my perspective, as informed by the literature, about what are perceived to be the central mental constructs and actionable methods of what it means to teach inclusively. This provided me with a framework as to what can be considered inclusive teaching and what is not considered inclusive teaching when conducting research in a school setting.

Chapter 4 and Chapter 5: Literature review: CHAT as a theoretical framework for this research project

These two chapters focus on the Five Basic Principles of CHAT which has been used as the theoretical framework for this study as well as the use of Engeström's (2000b; 2001) second and third generation activity systems through which the qualitative findings from the research conducted at the separate school sites were analysed. First, the historical origins of CHAT are described and contextualised with reference to the seminal scholars who contributed, and continue to contribute, to the evolution of CHAT. Secondly, examine how the Five Basic Principles of CHAT are relevant analytical tools to examine schools as complex systems. I

explain how these basic principles of CHAT can be employed to examine the actions of teachers, operating in their own right as components, functioning as part of a dynamic system, and being made up of other interconnected components. Thirdly, I discuss how CHAT and the associated theoretical tools of 'relational agency' (Edwards, 2007, p. 4) and 'relational engagement' are used in the data analysis process to identify affordances to inclusive teaching. This assisted me in going beyond merely identifying the existence of inclusive teaching. Instead, these analytical tools provided insight into why inclusive teaching was found to exist in the schools in the first place. Finally, Chapter Five looks at discussions that identify and explain the use of CHAT as a theoretical framework, how CHAT has been applied in other studies in education settings, and in other complex systems. These discussions provide the reader with a contextual reference as to how and where the ideas of CHAT have been successfully used in other settings and how they are then relevant to this study.

Chapter 6: Research methodology and design to capture factors that constrain or promote teachers from implementing an inclusive pedagogy in the contextual environments in which they work

In this chapter, I present the qualitative research methodology and the design of the enquiry implemented to gather the data and then analyse the themes that emerged from the coding process. The coding process and how the various categories and themes were derived is discussed in considerable detail. The research settings at the four, separate, but purposively selected research sites (schools), are also described. The qualitative data collection process and data analysis process is considered in relation to the relevant scholarly literature. This description provides the reader with a detailed account of the contextual environment where the school exists, the history that created the motive for a pre-existing need and the current challenges and opportunities presented to each school. Also provided is a biographical description of each of the principals and the teachers who voluntarily participated in the study, and a descriptive account of each research site. What is also described in this chapter is the reliability and the trustworthiness of the data collection and findings analysis procedures used. Finally, this chapter describes the use of an abductive approach (Oswald, 2010) to the data analysis process and explains how CHAT, as a theoretical framework, was used as a lens through which to interpret the data and guide the presentation of the findings.

Chapter 7: Inductive data analysis process

In Chapter Seven evidence of the inductive research process where the raw data was coded is provided. What is explained here is how the coded data allowed for categories and themes to

emerge. This information showed me that constraints and affordances to teachers being able to teach inclusively existed in each of the chosen schools. What emerged were central themes into which categories and sub-categories could be collapsed. In Chapter Seven, extracts from the interview data and observation notes are used to support the themes that emerge. The various emergent themes are discussed in relation to the supporting data that emerged from the data gathering and coding process.

Chapter 8: Data analysis: presenting the themes and categories obtained from an inductive data analysis process through the lens of CHAT as the theoretical framework

In Chapter Eight the themes that emerged from the inductive coding process in Chapter Seven were considered through the lens of Engeström's (2001) activity systems models to reveal contradictions that constrained inclusive teaching. Secondly, use of activity systems models allowed me to examine how the theoretical tools of 'relational agency' (Edwards, 2007, p. 4) and relational engagement showed teachers either being constrained or afforded in teaching inclusively within the context of a complex school system.

Chapter 9: Discussion and conclusion

In Chapter Nine the findings that emerged from the data analysis process were considered in relation to the research questions that led this study. This process allowed me to highlight the various factors that are constraining or affording teachers from teaching inclusively. In each case, the discussion focussed on the nuances and differences that existed at the research sites (schools) and how these constrained or afforded teachers from teaching inclusively. This chapter also makes a case for the use of CHAT, Engeström's Activity Systems Theory Models, and the theoretical tools of relational agency and relational engagement as a theoretical framework to examine inclusive teaching systemically - in relation to the complex, contextual environments presented by the different schools. In this chapter I also comment on the contributions that my findings can make to the greater body of scholarly knowledge. The various strengths and limitations of the study are also unpacked. Finally, recommendations for further study are made.

1.9 Glossary of terms associated with inclusive education

- Inclusive teaching: a description of the situation where teachers have an orientation to the ideas of inclusive education and incorporate teaching methods into their lessons that enable them to meet the challenges associated with teaching learners with a wider range of different learning needs.

- Mainstream education: the regular classroom into which learners with special educational needs can be integrated (Scheepstra, Nakken, & Pijl, 1999).
- Inclusive education: the concern in achieving equity by identifying and reducing exclusionary measures in schools and promoting access to curricula and belonging in school communities (Walton, 2011). And, by meeting the challenge of teaching children with a wide range of different learning needs.
- Special needs learners: typically includes those learners with physical disabilities and learning disabilities that result in educational underperformance (Peters, 2004). Often associated with a medical deficit diagnosis of disability.
- Disability studies: this approach sees disability as a culturally constructed experience as a result of the beliefs and practices that exist around how society responds to human difference (Gallagher, 2004).
- Learning barriers: a concept that implies that there are a number of impediments that are not necessarily intrinsic to a learner but that impede learning (DOE, 2001).

CHAPTER 2

PAST AND PRESENT LITERATURE ON INCLUSIVE EDUCATION IN SOUTH AFRICA AND INTERNATIONALLY

2.1 INTRODUCTION

In this chapter scholarly contributions to the literature on inclusive education within the South African context are examined. This is done within the context of the extant international literature. For this literature review it was considered necessary to identify themes from the body of literature for purposes of coherence and the formation of logical arguments. The three themes included South African scholars' conceptualisations of first, inclusive education, secondly, learner difference and thirdly, teacher attitudes towards inclusive teaching. It is argued by scholars (Leedy & Ormond, 2013) that a literature review is important in that it illuminates the study in light of earlier strategies that have dealt with similar problems, thereby assisting in the evaluation of the current study by comparing it with similar studies by other researchers. Although the literature review shows that commonality exists between the emergent categories or themes, I determined that organisation of the information into these three themes for the purposes of discussion was necessary to make sense of the direction that inclusive education is taking in South Africa.

2.2 South African scholars' conceptualisations of inclusive education

Early scholars engaged with the emergence of the ideas of inclusive education that were finding their way into mainstream educational thinking. Specifically, how to meet the challenges of teaching children with a range of different learning needs in the classroom. Scholars (Lomofsky & Lazarus, 2001; Soudien & Sayed, 2004; Muthukrishna et al., 2002) explained how the context of the South African landscape in the early 1990's was dominated by shifts in thinking associated with the demise of the apartheid system and the ushering in of a democratic and non-racial society that foregrounded the values of human rights and equality. Thinking and researching in the school education space was not immune to these changes taking place within the political and social landscape of South Africa. These fundamental changes had far reaching ramifications in education reform and also created tensions that played out in how society viewed learner difference, how schools function with learner difference and how the teaching of children with different learning needs was perceived and understood both by teachers and school administrators.

2.2.1 The historical emergence of policy and legislation for inclusive education in South Africa

In much of the early literature the research focusses on the consideration of the relationships and tensions between inclusive education, education policy formation and the contextual realities of teaching in post-apartheid South Africa. Given the political and social changes taking place in South Africa in the aftermath of the apartheid era, with the subsequent shift in thinking within education, research associated with education policy and its impact on teaching and learning emerged as a focal point in the late 1990's and early 2000's. This was evident in the work of scholars (Lomofsky & Lazarus, 2001; Jansen, 1998; Soudien & Sayed, 2004) who paid attention to education reform and policy and legislation directives in South Africa within the context of the field of inclusive education and inclusive teaching in the classroom. Within the context of the post-apartheid period, policy and legislation development, and institutional change, were guided by the fundamental and universal principles of democracy, human rights and equality. This contrasted with apartheid-era thinking in education which was strongly influenced by segregation, the ideas of the medical model, and concepts of 'normality' (Oswald, 2010, p. 31). As a result of the political changes in the country there was a discernible shift from policies and thinking associated with segregated education to the ideas of inclusive education. This was in line with a shift from racial segregation to an inclusive society based on the principles of human rights and dignity. This shift in thinking aligned with newly established constitutional laws set in place to govern and transform the education system in accordance with the ideas of an inclusive education system that recognised the rights of all children to an equitable education. This statement is supported in the literature where scholars (Lomofsky & Lazarus, 2001) describe evidence of a foregrounding of links between the newly promulgated national constitution, the principles of human rights, and inclusivity within education policy development. Therefore, a change in legislation and policy was necessary for shifting the values of society from one characterised by segregation and marginalisation towards a system based on the principles and values of inclusion and democracy. It is argued by Engelbrecht (2006) that educational change towards inclusive education was not just another teaching or operational strategy but rather a change that aimed to contribute to a democratic society and that this could only be achieved through fundamental reform.

There was a concern that policy and legislation change in education needed to be implemented to repair the damage created by the apartheid government (Jansen, 1998). It was envisaged that a process of policy reform would establish a sense of hope for learners who were vulnerable to

marginalisation and exclusion (Muthukrishna et al., 2002). However, scholars (Soudien & Sayed, 2004) argued that there was a concern that education reform had become politicised at the expense of the basic principles and pragmatics of teaching. Scholars (Soudien & Sayed 2004) argued that the state policies for education in the post-apartheid era were characterised by contradictions as the non-racial state had to make compromises with members of the old order thus leading to a re-racialisation of the state. This was as a direct result of the post-apartheid state being bound up with the processes of the various political negotiations and compromises between the National Party and the African National Congress that formed, initially, a coalition government. Soudien and Sayed (2004, p. 101) argued that what transpired was that education became a "prime site through which the rearticulated racial state could be observed." The authors argue that within the new policies created by this hybrid state there existed hidden legal provisions and formulations that promoted subsequent racial practices that came into existence as a direct result of the ambiguity of the text contained in the various policies. For example, the general direction of the education policy embodied in the South African Schools Act of 1996 (SASSA) that aimed to provide a free, compulsory and equal education for all learners contained exclusionary possibilities. Central to this was the policy decision in the SASSA (1996) that allowed for decentralisation of authority for school administration and governance away from the state and the devolution of this authority to the management organs of schools that included schools governing bodies. Soudien and Sayed (2004) argue that although this policy decision on the provision of schooling can be seen as inclusionary, and where legal provisions had the best intentions of deepening democracy by promoting freedom of choice and participation, this decision lent itself to exclusionary actions. It is argued that the way in which the policy decision to decentralise education authority came into effect gave little cognizance to racially and economically defined communities who could be excluded based on physical geography. This is relevant to the post-apartheid landscape in South Africa where, although the racist laws of segregation were abolished, people still lived in communities that were physically separated along economic and racial lines. Therefore, the policies of decentralisation only served to preserve the privilege of schools that sought to control which children to include and which to exclude. This was achieved by schools that could determine their own access and admission policies. This is relevant in relation to my study as schools in South Africa continue to manipulate these policy directives to their advantage and decide on who should or should not be allowed entry to a school. Soudien and Sayed (2004) also explained how a fundamental flaw in the policy practices of decentralisation was that schools could determine how they mediate the national curriculum and the language

medium through which education is taught. The flaw in the policy was clear to see where there were schools where the majority of learners were not mother tongue English speakers. This was ignored and no effort was made to incorporate the children's own mother tongue languages in an affirming way. This is relevant to my study as these actions contradict the idea of inclusive education where schools are directed to teach for all learners.

The issue of political responses to racial discrimination was prominent in the literature in the early years of South Africa's democracy (Enslin, 2003; Carrim, 2003; Naicker, 2005; Sayed, 2004; Fiske & Ladd, 2004). This was borne out in a study by Enslin (2003) who explored how education was understood in South Africa's newly formed democracy against the backdrop of a society deeply scarred by racial divisions. This focus on race relations was in response to answering questions around how the education system should change in post-apartheid South Africa. What was seen in the literature was how the research around inclusive education shifted from focussing on learners' educational needs in the classroom space to examining inclusive teaching with reference to what was taking place within the context of governmental politics (Sayed, 2004; Carrim, 2003). This focal shift in research was in direct response to the ingrained policies and practices of the apartheid government where laws of segregation continued to cast a shadow of influence within society. It was necessary to ensure that all learners in the newly democratic and non-racial South Africa had an equal right to education without discrimination (Naicker, 2005). This led some scholars like Carrim (2003, p. 20) to conclude that inclusion is not about the integration or the "assimilation or accommodation" of people with disability "within existing socio-economic conditions or relations," or about making disabled people feel as normal as possible, but rather about the transformation of society in regard to its values which were aimed at eradicating exclusion and racial discrimination.

Sayed (2004) commented that transformations in education were in direct response to the legacy of apartheid and that such transformations were politically motivated. Therefore, the focus on issues of racial discrimination had a direct connection to the South African context and educational reform given the political upheavals and transformations that were prevalent in the society at the time. This statement is supported in the literature where a scholar (Naicker, 2005) argued that the main reason for the development of National White Paper 6 (WP6) was in direct response to the immorality of racism and exclusionary practices that marginalised vulnerable learners. The foregrounding of inclusive education in socio-political arguments is still topical in South African literature today as the society continues to grapple with racism. As a result, it is evident that much research (Oswald, 2010) about inclusive education continues

to be influenced by issues of human rights and inclusivity, where inclusive participation for all learners is viewed as an essential element of human dignity.

These findings from the South African literature are aligned with international research that highlights social transitions in political terms. Within the international literature this is outlined as being between the established practice of special education with its segregation promoting policies and practices, and the interests and ideas of inclusive education that promote educational access in the classroom for all learners. The adoption of the ideas of social justice, wherever it takes place in the world, is typified by research conducted by scholars (Dyson, 1999; Vlachou, 1997) who highlight the plight of oppressed groups within a wider social struggle. In other words, this struggle is essentially between the forces of inclusion and exclusion.

2.2.2 School and educational exclusion

In the literature it was found that the ideas of inclusive education were often discussed alongside what it means to exclude learners. Scholars (Sayed, Subrahmanian, Soudien, Carrim, Balgopalan, Nekhwevha, & Samuel, 2007, p. 1) define school exclusion of learners as "the denial or restriction of access to and meaningful participation in educational institutions and processes." It was argued by Sayed et al, (2007) that issues of inequality of race, class, gender and ethnicity exist in education systems all over the world. These inequalities affect all aspects of education from enrolment and attendance to levels of achievement both in South Africa and globally. By focussing research on factors that led to educational exclusion, Soudien and Sayed (2004) elevated inclusive education out of the educational directives of the White Paper 6 (WP6) and moved it into the broader domain of society. This was important because of the reality of living in a society where such extremes could be encapsulated into categories defined by those people excluded from educational opportunities and those not.

People living in poor socio-economic circumstances are excluded from opportunities afforded to others (Sayed et al, 2007). Sayed et al. (2007) argue that patterns of inequality in education in South Africa correlate consistently and significantly with gender and poverty. This argument supports Fleisch (2008) who postulates that achievement in primary schools is directly constrained by learners' lack of access to health care, their vulnerability to disease, inadequate nutrition and poor welfare and furthermore, by a learner's family's low literacy level. Fleisch (2008, p. 30) refers to what he calls a "bimodal distribution of achievement" in his study on mathematics achievement in primary schools in South Africa. Clustered around Fleisch's

(2008) ‘first mode’ are most primary school children who come from disadvantaged schools and only achieve a rudimentary understanding of mathematics concepts. However, clustered around Fleisch’s ‘second mode’, are a high achieving group of learners all coming from middle class communities.

Fleisch (2008) also describes the correlation between school achievement and health, where he highlights how malnutrition, foetal alcohol syndrome and parasitic infections, so prevalent in disadvantaged communities, negatively impact scholastic performance. These findings are reflected by Spaull (2013, p. 444) who argues that there is a “strong correlation” between education achievement and wealth, where less wealthy learners perform considerably worse than their wealthier counterparts.

The issues of education exclusion also relate to schooling opportunity. Spaull (2013, p. 438) argues that schools in poorer communities had a higher percentage of “dysfunctional” schools in comparison to those in wealthier communities. Spaull (2013) concludes that this can be correlated with the disparity of wealth between schools in well off communities that are financially supported and those schools from poorer communities. I concluded that these scholars engaged with the concepts and issues of school and education exclusion as this would allow for a greater understanding of the complex reasons behind why some learners are excluded from educational opportunities and others are not. This is relevant within the context of this study as a researcher needs to considers how environmental factors such as socio-economic challenges constrain inclusive teaching at some schools in South Africa.

Questions posed by scholars (Soudien, Carrim & Sayed, 2004) discussed what or who I intend to include. If, for example, inclusion operates on the conceptualisation of normalisation, where groups in society are included in their ideal forms - be it race, gender, culture or any other grouping - then there exists the inherent danger of excluding those people who fall outside of the defined categories (Soudien, Carrim & Sayed, 2004). The danger of this type of exclusion can be directly related to inadequate engagement with social justice concerns (Sayed & Soudien, 2003). This argument reflects similar scholars’ findings in the international literature who argue that notions of human rights and inclusion should be inexorably linked to one another, and that the struggle against exclusion in all its manifestations needs to be at the forefront of research which seeks equality for all learners within the context of society (Kenworthy & Wittaker, 2000).

The fact that discussion around school and educational exclusion has been prominent in the literature (Sayed & Soudien, 2003; Soudien, Carrim & Sayed, 2004; Spaull, 2013; Fleisch, 2008) is testimony to the fact that constraints to inclusive teaching extend beyond the classroom. Therefore, ideas of inclusive education must encapsulate an understanding of social circumstances and how these impact on education access for learners.

2.2.3 Implementation of inclusive education

In the South African literature scholars engage with the issue of the implementation of inclusive education in schools. In many cases, discussion focussed on identifying what was constraining the implementation of the directives of the White Paper 6 (DoE, 2001). This is not surprising as more than fifteen years since the development and publication of the WP6 it has been argued that inclusive education implementation remains constrained in many South African schools (Nel, Tlale, Engelbrecht & Nel, 2016; Makoelle, 2012). There are many arguments from the literature that account for the lack of inclusive education implementation. These arguments include first, reservations or criticisms levelled at the Department of Basic Education, where the DBE stands accused of not having done enough to prioritise and implement the directives of the WP6 (Donohue & Bornman, 2014). Secondly, that there is little consensus on what should, or should not be deemed as disability in South African schools (Meltz et al., 2014). Thirdly, not enough has been done to address teacher preparedness for inclusive education. Donohue and Bronman (2014; 2015) argue that many teachers in South Africa were trained to teach either general education or special education with the result that teacher training institutions qualified many teachers who actually lack the skills to teach learners with disabilities. Also prominent in the literature was discussion that pointed to the insufficient contribution made by school leaders to in-service teacher education, a reluctance of teachers to participate in inclusive education teacher training and inadequate knowledge presented by teacher education programmes (Geldenhuys & Oosthuizen, 2015). Fourthly, as discussed in the previous section, were the issues of wealth disparity, social and cultural challenges and a lack of resources as a constraint to inclusive teaching (De Jager, 2013). Finally, findings indicated that a significant constraint to inclusive teaching related to the lack of clarity around the interpretation of the WP6 and confusion around the goals and definitions of inclusive education, and the means through which they could be achieved (Donohue & Bornman, 2014).

These findings point to multi-faceted reasons accounting for a lack of traction in inclusive education implementation in South African schools. Other scholarly work (Makoelle, 2012) is

aligned with these findings, where it is argued that constraining aspects which include socio-economic barriers, communication issues related to language of instruction and learning, physical faculties and issues with poor teacher education exacerbate the problem. Another consideration, highlighted in the recent research, is the nonalignment between the goals of the Curriculum and Assessment Policy Statement (CAPS) and those of the White Paper 6 (Geldenhuys & Wevers, 2013). This has the negative effect of impeding the achievement of either set of objectives for each policy respectively. More recent research continues to examine constraints to teachers' ability in implementing inclusive teaching in their classrooms. For example, scholars (Nel, Tlale, Engelbrecht & Nel, 2016) found that pre-service teacher education at universities leaned towards a medical/individual model. Finally, Nel et al. (2016) reported that although District Based Support Teams (DBST), Institution Level Based Support Teams (ILST) and Full-Service schools (FSS) offer various degrees of support for teachers for inclusive teaching, within the context of individual school settings, they fall short in offering practical solutions for inclusion and referrals were tedious.

Literature also reports on examples within the South African school context where inclusive teaching has been successfully implemented. For example, Walton (2011) provides evidence of efforts to create inclusive teaching environments in South Africa. Walton (2011) describes the efforts of principals and management teams making active decisions to create less exclusionary school environments where teachers are encouraged to take up the challenge of teaching children with a wide range of different learning needs. It was seen that these proactive principals do not wait on policy or government support for assistance. Instead, they encouraged a sense of proactiveness within their schools. It was seen that where these school principals have fostered inclusive ideas or school cultures, they have managed to mobilise human, technical and monetary resources to support their initiatives. There is evidence of these schools addressing a variety of constraints to inclusive teaching ranging from issues related to socioeconomic status, different learning needs, cultural diversity, and language barriers. Walton (2011) explains how examples of this proactive approach to creating inclusive learning environments were seen in a diverse range of learning contexts across South Africa which included wealthy independent schools, inner-city schools and rural schools. It was also found by scholars (Nel, Tlale, Engelbrecht & Nel, 2016) that, in some cases, district-based-support-systems had helped some teachers on an organisational level and with advice on how to meet the challenge of teaching to a range of different learning needs.

Concerns around the implementation of inclusive education are not only confined to the South African context. Discussions in the extant international literature aligns with the issues discussed in the South African literature that are seen to be constraining inclusive education implementation. For example, on the international stage, Das, Kuyini and Desai (2013) concluded from their study of Indian schools that class size, number of learners with disabilities in the class, limited support from school personnel and an overwhelming majority of teachers surveyed who were underprepared and who did not have access to support services, were all factors that constrained the implementation of inclusive education. It was concluded by scholars (Blanks, 2014; Das et al., 2013) that teachers' negative attitudes, lack of confidence and lack of pedagogical and content knowledge are all factors that need to be addressed in order to improve the implementation of inclusive education in schools. Also, Opoku, Mprah, Badu, Mckenzie & Agbenyega (2017) reveal a host of constraints to the implementation of inclusive education in Ghana. The authors identify inadequate school readiness for the implementation of inclusive education policy, the entrenchment of special needs thinking where learners identified as not coping in mainstream schools are placed in special schools, provision of resources and infrastructure were insufficient, and a lack of pre-service teacher education to equip teachers with the skills for inclusive teaching. Finally, Eleweke and Rodda (2002) concluded from a study that investigated the challenges of implementing inclusive education in developing countries that the absence of support services, relevant materials, inadequate teacher training programmes, a lack of funding and the lack of enabling legislation were the major problems constraining the implementation of inclusive education. Here I have shown that the international literature demonstrates that the constraining factors associated with inclusive education implementation and inclusive teaching are similar in many countries, with a high incidence of similarity reflected in developing countries. This is despite significant contextual circumstances, unique to each country, often mentioned as the primary constraint.

2.2.4 Conflicting ideas as a challenge to the implementation of inclusive education

Points of discussion that gained attention in the early literature and are still prominent in recent scholarly research, are the issues around the multiple and sometimes conflicting ideas about what can be defined as inclusive education. This ambiguity creates fertile ground for confusion and misinterpretation. This also raises questions around the degree of progress, or lack thereof, in educators' understanding of what inclusive education is since its emergence in educational thinking. Historically, inclusive education was conceptualised at the Salamanca World

Conference on Special Needs Education in Spain in 1994, and outlined a specific mandate to critique and change the education system in line with the ideas of social justice.

What is evident in the recent research (Meltz, Herman & Pillay, 2014) is how confusion between the multiple ideas that are prevalent in inclusive education impact understandings of inclusivity at a grassroots or micro level when they conducted qualitative research with teachers in school settings. The authors found that it was apparent that there were some teachers who conceptualised inclusive education from a medical model and others whose understandings stemmed from an affinity with the social model. The resultant implications were that the conflicting models which teachers adopted pulled the respective groups in different directions. The argument is that this confusion as to what ideas inform inclusive teaching and the subsequent lack of clarity is impacting negatively on inclusive education implementation (Meltz et al., 2014).

In this thesis, the concept of differentiating between the medical or individual model of disability and the social model of disability is central to conceptualisations of inclusive teaching with the focus on meeting the challenge of teaching learners with different learning needs. Oliver (2013) explains how the social model of disability stemmed from the idea that people were not disabled by their own individual impairments but instead by the disabling barriers that are imposed on people from within the society in which they live. Oliver (2013, p. 1025) argues that the "hegemony" or dominance of special education has "barely been challenged in many schools" as the solutions offered to support children are traditionally based on the medical or individual model of disability. It is worth mentioning that the social model has not been spared from criticism either since its inception as an alternative way of thinking about disability. Oliver (2013, p. 1025) explains how first, one enduring criticism is that there is no place made for any type of "impairment in the social model of disability." The second criticism levelled at the social model is that it does not take into account the concept of 'difference' and instead presents disabled people as one "unitary group" of people, while in reality people's sexuality, gender, race and age for example make needs and lives more complex (Oliver, 2013: p. 1025).

The issues regarding the confusion around inclusive thinking, as a result of the conflict between the ideas of the entrenched medical/individual model and the ideas behind the social model, have been found consistently in the South African literature over the last twenty years. For example, in the South African context, Smit (2012, p. 377) explains how the reductive nature of a medical model, which attributes perceived inadequacies as internal to a learner, is based

on ‘stereotypes’ and generalisations which ‘ultimately alienates students’ from learning opportunities. This reflects similar trends in the international literature where scholars (O’Shea, Lysaght, Robets & Harwood, 2016) argue from a study conducted in Australia that a framework of deficit thinking in education informs practice regarding the integration of non-traditional learners into mainstream settings. It is suggested that an orientation to a social model of thinking is necessary to challenge a medical model or deficit model of thinking about learner ability. Similarly, Carrington and Saggers (2008, p. 796) argue that “A socio-cultural perspective challenges the tradition of deficit and medical models in education to describe ‘‘school failure’’ as residing in the child by considering cultural and social influences that impact on performance at school.” Finally, a study by McIntyre (2009) reports on how teacher education for inclusion in universities can be disruptive to the status quo of the ability labelling and alignment to the medical model so apparent in most schools in the UK. It therefore emerged from McIntyre’s (2009) study that for those people who work in schools that subscribe to the medical model, the idea of introducing teachers who enter their practicum experience with the ideas of inclusive education framed with the ideas of social justice, will require a sensitive collaboration with all school-based partners. This observation supports the views held by other scholars in the international arena (Florian, 2008; Ainscow, 2007) where they argue that the concept of inclusive education is a complex one and has come to mean many different things for different role-players across a variety of contexts.

2.3 Learners and their difference

A challenge facing teachers and school leaders who are committed to inclusive teaching is how they respond to learner difference (Florian & Black-Hawkins, 2011). What this section illuminates are aspects related to developments in the inclusive education field in South Africa over the last seventeen years, specifically with regard to how learner difference is conceptualised. In this broad category of learner difference, I identified that many studies could be further organised into sub-categories. First, the re-emerging role of support services in response to learner difference and secondly, research that focussed on teachers’ responses to individual difference. What follows is a discussion of the earlier and more recent local and international literature on these sub-categories.

2.3.1 The role of support services in response to learner difference

Scholars (Lomofsky & Lazarus, 2001) who focus their studies in the field of inclusive education paid attention to the role of school-based support services when considering learner

difference. Traditionally, this has been the domain of those services that subscribe to a medical/individual model (Engelbrecht, Nel, Smit, & van Deventer, 2016). Examples of these services include the well-established role of educational psychologists, speech therapists and remedial education teachers and that of other specialists. These facilitators to the education process rely on diagnostic testing to identify learning barriers and then remedy the identified learning deficit though an intensive therapeutic process that traditionally takes place away from the classroom. Schools that subscribe to this well-established and entrenched practice, frequently rely on a support system where learners are removed from lessons to attend separate one-on-one therapies with the designated 'specialist' in a separate room or support centre. This observation is substantiated by the research of Walton, Nel, Hugo and Muller (2009) whose findings conclude that learners in many independent schools in South Africa, more often than not, rely on a system where learners are withdrawn from regular classes to receive specialist therapy from the relevant learning support specialist available to the school. Within the South African context, scholars like Engelbrecht (2006) drew attention to concerns with the ideas of the medical model and its influence on teaching continuing as it had done in the past. This finding is aligned with the views of Naicker (2005) who said that in order to move towards an inclusive education way of thinking educationists are required to dispense with entrenched special education theories and their associated methods of classroom practice. Reasons for concern raised by scholars (Liddell & Kemp, 1995; Naiker, 2005) included, first, that educational services informed by medical model ideas ran the danger of assigning labels to learners and in some cases allowed for possible unreliable diagnoses of disability. It was further argued (Naiker, 2005) that if special needs thinking was not addressed, stakeholders in education in South Africa would run the risk of reproducing the status quo rather than affecting transformative changes. Secondly, within the South African context, over-reliance on psychological services to address a range of different learning needs of children would represent an uneven distribution with learning support only available to pockets of privileged communities at the expense of those communities that are socio-economically deprived (Liddell & Kemp, 1995). The risk of having remedial or psychological services as the accepted solution to supporting learners with different learning needs is that in communities where external support services are not available any other options available to teachers would be limited as they are not supported. Finally, scholars (Liddell & Kemp, 1995) who grappled with the notion of support services being a solution for inclusive education, point to a skewed focus on the learning need being innate and internal to individual learners and largely ignore the broader eco-systemic issues. An example of this is how socio-economic factors impact on a

learner's emotions and behaviour (Liddell & Kemp, 1995). There is the danger that these environmental factors are not given adequate consideration as a constraining factor in the child's ability to learn.

Given these concerns, scholars who research inclusive education began to challenge the established and entrenched roles of learning support specialists within the school space and began devising arguments from research findings suggesting how their respective roles could be redefined or recontextualised (Engelbrecht, 2004). It was argued by scholars (Engelbrecht, 2004) that rather than the so-called education specialists being the 'knowers of specialist knowledge' they should redefine their roles, where they instead become collaborators who consult with teachers and support them in the classroom. To achieve the redefinition of the roles of learning support specialists they would have to provide their specialised skills in a variety of contexts that would include both the classroom and the general community, with the focus on collaborating with teachers in the common cause of creating educational environments that meet the challenges of teaching children with a range of different learning needs. Although a contested issue, it was argued by Engelbrecht (2004, p. 24) that for learning-support specialists to be relevant in inclusive schools they would have to change their methods of practice or "existing job roles" and be fully integrated into the classroom space with the teachers, rather than be seen as purveyors of specialist knowledge that is withheld from the reach of teachers. Scholars (Engelbrecht, 2004; De Jong, 2000; Lomofsky & Lazarus, 2001; Muthukrishna & Schoeman, 2000) argue that there needs to be full integration through collaboration with teachers in the classroom environment for learning-support specialists to remain significant within the inclusive space.

This discussion challenges the traditional role of educational support services in inclusive schools. As mentioned, there is a call by some scholars (Engelbrecht, 2004) for support services to redefine their occupational roles. It is argued that if a fundamental conceptual change in thinking about the role of support specialists in schools does not take place, schools will not change the way they operate and utilise these resources (Engelbrecht, 2004). Scholars (Engelbrecht, 2004; De Jong, 2000; Lomofsky & Lazarus, 2001; Muthukrishna & Schoeman, 2000) suggest that unless a redefinition of roles for specialist support providers is embraced their purpose in schools will also become largely irrelevant. However, some early researchers (Donald & Hlongwane, 1993) had a different outlook for support specialists and considered their role from another perspective. Donald and Hlongwane (1993) argue that inclusive education without the contributions and knowledge of specialist support specialists would in

effect be inclusion by default. This view is supported by scholars (Hay, 2003; Pillay & Terlizzi, 2009) who surmise that the survival and ultimate success of inclusive education gaining traction relies on the ability of educational specialists continuing to have a prominent role by providing support through the application of their specialist skills. What can be deduced from the research (Engelbrecht, 2004; De Jong, 2000; Lomofsky & Lazarus, 2001; Muthukrishna & Schoeman, 2000; Donald & Hlongwane, 1993; Hay, 2003; Pillay & Terlizzi, 2009) is first, that the specific role of specialist support services in the inclusive education space is a contentious issue and secondly, further researcher is needed to examine how learning-support-specialists might be required to transform their methodological approaches and viewpoints in order to stay relevant and make a positive contribution to inclusive education and inclusive teaching practices.

International scholars (Farrell, 2004; Farrell & Balshaw, 2002) challenged the role of educational support specialists in inclusive schools and considered the conceptual issue of how and whether special education should or could be decoupled from inclusive education. Also evident in the international literature (Brantlinger, 1997; Tuettemann, Slee & Punch, 2000; Slee & Allan, 2001), and aligned to the South African literature are the feelings of a 'collective anxiety' about the resilience of traditional forms of special education and the subsequent 'specialists' role' which only serve to maintain unreconstructed ideas of schooling.

The debate around the roles of specialist support services in schools that embrace inclusive teaching is a perennial topic that is still evident in the more recent South African literature. For example, scholars (Oswald & De Villiers, 2013) have a more pragmatic approach and describe the functional details and operational structures behind necessary networks of support and collaboration between teachers and support services. Also, Nel, Engelbrecht, Nel and Tlale (2014) postulate that there needs to be a consideration of equality issues and the unequal 'power relations' that exist between educational specialists and classroom teachers if specialist support services are to work effectively in inclusive schools. The scholars further argue that collaborative partnerships between teachers and special support providers are an elusive challenge for stakeholders in education, which can be partly attributed to the strained relationships and mistrust between these significant role-players. In this respect, scholars (Nel et al., 2014) conclude from a study that teachers do not feel equal in their partnership with the various learning support specialists when it comes to providing support to learners with a range of diverse learning challenges. The authors argue further that this has a negative effect where teachers defer to the perceived 'specialist' and their assumed superior knowledge. This has the

net effect of undermining the teacher's role and efficacy in being central in the lives of those learners that need to be included into learning process. These unequal power dynamics between teachers and educational specialists perpetuate the fertile ground for exclusionary practices that include extracting learners from the classroom lesson to attend individual support sessions (Nel et al., 2014).

The literature showed that there was ongoing concern related to the benefits that learning support specialists have for the learning and teaching at a grassroots level in the classroom. For example, scholars (Engelbrecht, Nel, Smit & Van Deventer, 2016) pointed out how, after thirty years of inclusive education thinking in South Africa, even in 'full-service' schools (schools specifically designed to be inclusive and act as inclusive support centres for entire communities) the only significant role of learning support specialists was to conduct the process of assessment and placement of learners into special needs classes. This argument concluded that learning support services only served in an organisational role in the process of categorising learners for special attention. Any skill transfers from learning support specialists to teachers for use in teaching circumstances to meet the challenges of teaching learners with a wide range of different learning needs were found to be absent in those schools that were part of the study (Engelbrecht, Nel, Smit & Van Deventer, 2016).

However, some scholars like Freedman (2016) look at the learning support specialist role from a different perspective. Freedman (2016) points to the contested nature of inclusive education, with researchers in the field informed by different schools of thought and working from a variety of different viewpoints. For example, scholars (Topkin, Roman & Mwaba, 2015) recommend that South African policy makers revisit the decision to phase out special needs facilities in schools and argue that special provision needs to be implemented to allow for, and to promote the use of specialist support staff to work specifically in the class with those learners diagnosed with ADHD. Some researchers like Williams (2016) suggest that special-needs knowledge is integral to the implementation and sustainability of education for diversity and that the special-needs teacher must be adaptable and be able to adjust to a multitude of teaching and support situations. Furthermore, Freedman (2016, p. 48) concludes that "new discourses rooted in inclusive pedagogy are needed if we hope to reduce the negative outcomes associated with the ADHD label, that have been so well documented in the narratives of special education textbooks." This research points to the influence of special needs thinking and the medical/individual model prevalent in education studies.

This evidence of on-going research in the South African literature into the often-contentious issue of the relationships between educational specialists and classroom teachers reflects debate and research on the international stage. Problems between classroom teachers and specialists were found to have a negative impact on inclusive teaching internationally as well as locally. For example, scholars (Kanter, Damiani & Ferri, 2014) recommended that for the uptake of inclusive education in schools in Italy to be successful there was a need for greater collaboration and mutual acceptance between the teachers and learning support specialists.

2.3.2 Responses to individual difference by teachers

How teachers address inclusive teaching practices in their classrooms and the range of different learning needs they are presented with is a focal point of research in the South African and international literature. The arguments in favour of specialised teaching techniques in inclusive classrooms, targeted at learners with diagnosed learning problems, is still evident in more recent literature. For example, scholars (Norwich & Lewis, 2001) criticise a trend in education that has moved away from specific special educational needs pedagogies. Norwich and Lewis (2001, p. 325) explain how their research "indicates that although common teaching principles and strategies are relevant - more intensive and explicit teaching is also relevant to pupils with different patterns and degrees of difficulties in learning." They argue for a continuum, where they state that there are many instances where common teaching approaches can be used for all learners in the class. However, children with some learning difficulties or differences will require specialised or distinct types of teaching at other times. "The concept of a continuum implies that there are differences of degree, so by teaching continua we mean that the various strategies and procedures which make up teaching can be considered in terms of whether they are used more or less in practice" (Norwich & Lewis, 2001, p. 325). From this discussion, Norwich and Lewis (2001) argue that children with different kinds of learning difficulties are neither effectively nor adequately provided for by teachers in mainstream classes. Scholars (Bryant, Bryant & Smith, 2016) argue that a wealth of evidence-based instructional practices exist which serve as effective in assisting learners with special educational needs in inclusive settings. Montgomery (2013) points to what can be described as a lack of documented solutions in the literature to supporting learners with a range of different learning needs that is actually supported by empirical data. Finally, some researchers (Perold, Louw & Kleynhans, 2010) argue that in order to be effective, inclusive educators who are able to be of assistance to learners with different learning needs also need to increase their knowledge of the diagnosis

and treatment of learners with special needs, notably Attention Deficit Hyperactivity Disorder (ADHD).

As previously mentioned in this chapter, some scholars consider a social model as an alternative conceptual framework to guide their thinking about the different learning needs of children. As a result, there is evidence that a shift in thinking is emerging around how teachers should address teaching learners with a range of learning needs. Some scholars (Kriegler, 2015) are moving away from a reliance on the medical model that informs their understanding of different learning needs and subsequent pedagogical responses and are shifting toward a social model. For example, scholars (Naidoo, Singh & Cassim, 2015, p. 134) focus their research on the emotional and environmental factors associated with learning differences and are investigating which 'whole-school' inclusive teaching strategies would create meaningful learning experiences for all learners without the need for techniques that specifically target individuals with diagnosed medical conditions. Whole-class teaching techniques and the development of a range of inclusive teaching practices has been the focus of research into how best to include all learners in lessons. This includes learners with significant barriers to learning such as visual impairment (Wiazowski, 2012; Naidoo, Singh & Cassim, 2015). Scholars (Walton, Nel, Muller & Lebeloane, 2014) suggest that teachers must undertake a fundamental shift in their understanding of learner difference, moving away from a medical model (Oliver, 2013) towards a way of thinking informed by a human rights or social model.

The idea that researchers need to critically analyse the medicalised narrative and those influences on teaching that are inconsistent with the ideas of inclusive education is also reflected in literature on the international scene. As mentioned previously, Freedman (2016) concludes that there is a call in the extant literature to find alternative solutions to classroom teaching to learner difference that embraces whole-school teaching methodologies in teachers classrooms. I argue that there will always be contested opinions emerging from research depending on the theoretical or conceptual lens that informs thinking as well as the academic background of a researcher.

2.4 Teachers' attitudes towards inclusion

A category that emerged from the relevant extant literature was around teachers' attitudes, feelings and sense of self-efficacy towards directives to implement inclusive teaching in classroom settings. I concluded that this category warrants discussion and is relevant to this research project as teacher attitudes can be an intrinsically motivated factor that constrains or

promotes inclusive teaching in schools. In the first section, I discuss the earlier literature that investigated teacher feelings, attitudes or opinions as they related directly to them being required to teach inclusively. The second section examines the extent to which more recent research has changed in focus around teacher attitudes and self-efficacy when it comes to inclusive teaching.

2.4.1 Earlier literature

Many scholars conducting research in the early 2000's within the South African context focussed their research on teachers' attitudes towards the ideas of inclusive teaching. Findings from numerous studies showed that teachers' attitudes were predominantly negative. Scholars (Kenworthy & Whittaker, 2000; Soudin & Sayed 2004; Wildeman & Nomdo, 2007) concluded that the reasons for teacher negativity were the apparent lack of institutional support or training for inclusive teaching and the lack of human and material resources to achieve inclusive outcomes. Other research referred to teachers' concerns with large class sizes and the additional demands on teachers' time and energy (Davies & Green, 1998); feelings of having inclusive education foisted upon them, and concerns about the implementation of policies (Engelbrecht, Forlin, Eloff & Swart, 2001); negative sentiments as a result of having to respond to top-down policy directives with little preparation or engagement (Botma, Gravett & Swart, 2000); and respondents' thinking in terms of frameworks of special education (Hay, Smit & Paulsen, 2001). Other concerns included a lack of teacher support, inadequate knowledge, skills and training, insufficient facilities, a lack of resources and worries about the potential effects of inclusive education on learners in the long term (Swart et al., 2002; Mashiya, 1998). Finally, negative sentiments towards the ideas of inclusive education and teachers having to use inclusive teaching practices were linked to the teachers expressing feelings of confusion manifesting as a result of the advent of the new ideas of inclusive teaching, specifically with regards to the confusion between special needs thinking and inclusive education thinking as outlined in the White Paper 6 (Da Costa, 2003). What also emerged from the literature was where scholars (Englbrecht et al., 2001; Engelbrecht, Oswald, Swart & Eloff, 2003) commented on how workplace stress-related factors affected teachers' ability to teach inclusively. The teachers explained how teaching in mainstream classes made them feel in control. However, they felt a sense of inadequacy when faced with the demands of inclusive teaching, albeit with them having the same academic expectations of the class of learners as directed by the curriculum (Englbrecht et al., 2001; Engelbrecht et al., 2003).

There are examples from the literature where scholars suggest solutions to alleviate negative teacher attitudes and feelings of under-preparedness when it comes transitioning to the ideas of inclusive teaching. For example, scholars (Swart et al., 2002) argue that well thought-out in-service teacher training programmes, and the provision of high-quality support services in collaboration with teachers, may lead to more positive teacher attitudes towards inclusion. However, most of the research (Botma, Gravett & Swart, 2000; Bothma, 2000) pointed out the negative effects that the ideas of inclusive education were having on teacher attitudes. There were attempts made by researchers to address teacher negativity towards inclusive education. For example, Swart, Engelbrecht, Eloff and Pettipher (2002) suggested that teachers be actively involved in the process of seeing inclusive education come to fruition in their school contexts and that teacher-education initiatives are critical to drive this. Also, scholars (Swart, Engelbrecht, Eloff & Pettipher, 2002) concluded that in-service programmes were necessary to achieve an attitude change in teachers from a negative perspective to seeing inclusive teaching in a positive light. Furthermore, it is argued that pre-service programmes must have a directed focus on skills training in the management of learners with special educational needs in the classroom (Swart et al., 2002). What is apparent, is that the research recognises the need for teachers to be emotionally supported and upskilled for a necessary shift in thinking in order for the ideas around inclusive teaching to gain traction. Scholars (Swart et al., 2002) identify the interconnected relationship between inclusive teaching and the school's resources as well as collaborative teacher-support between teachers where they support each other emotionally and in terms of sharing ideas for teaching learners with a range of different learning needs, as necessary for the implementation of inclusive teaching.

As with the prevalence of studies (Botma, Gravett & Swart, 2000) that focus on teachers' negative attitudes and their feelings of incompetence and under-preparedness associated with the demands of inclusive teaching, there have been studies that investigate the idea of a teachers' self-efficacy within the frame of inclusive teaching. Self-efficacy can be described as a person's capacity to execute specific behaviours necessary to produce determined performance attainments (Bandura, 2012). Scholars (Engelbrecht, Forlin, Eloff & Swart, 2001) identify how the demands associated with inclusive education have had a negative impact on teachers' self-efficacy. The authors' research reports on possible frameworks to improve teacher self-efficacy.

It is critical to identify the specific conditions that are most likely to create classroom stress for teachers in inclusive settings. It is argued by scholars (Engelbrecht, Forlin, Eloff & Swart,

2001) that identifying the specific conditions related to teacher stress will mitigate the negative consequences, fears and subsequent anxieties associated with inclusive teaching. Engelbrecht, Forlin, Eloff & Swart, (2001) propose a solution to low teacher self-efficacy that involves a recognition that responding to a range of different learning needs in the classroom must be the shared responsibility of all the role-players: teachers, parents, learners, support-staff, and other care-givers. Engelbrecht, Forlin, Eloff & Swart, (2001) further explain how changing and expanding on the traditional roles of these individual members, and assimilating these changes, especially for teachers, can be a challenging endeavour.

I propose that the research discussed (Engelbrecht, Forlin, Eloff & Swart, 2001; Swart, Engelbrecht, Eloff & Pettipher, 2002; Botma, Gravett & Swart, 2000), where teachers' negative sentiments or attitudes towards inclusive education are highlighted, are indicative of contextual and social change. At the time when the abovementioned research was being conducted, South Africa was a democracy in transition, with an education system that was finding its way out of a situation where it provided a superior form of education for a minority of learners and an inferior one for the majority as a result of segregation policies. Coupled with this was a departure from the segregated nature of the education system typified by the apartheid state, which relied on special schooling where regular teachers were "led to believe that it was beyond their level of expertise to teach learners who were classed as disabled and that this had to be done by specialists." (Naicker, 2005, p. 237). For example, to support my point, Hay (2003) reported that both experienced teachers and learning support specialists in this transition era in South Africa were challenged by these new ways of thinking about different learning needs of children and schooling with its different ideas of teaching informed from different perspectives and that this was not how they had been trained to teach. Hay (2003, p. 135) described this phenomenon as 'change overload' where experienced educators tried to come to grips with a new way of teaching and understanding the ideas of transformation. When considering Hay's (2003, p. 137) research conclusions it makes sense that both educators and learning support specialists felt underprepared to cope with the new challenges brought about by the directives and the 'paradigm shifts' needed to implement the ideas of inclusive education.

Not all findings in the literature concluded that teachers had a negative attitude toward inclusive teaching. In fact, some scholars researching within the South African context reported positively on teacher self-efficacy for inclusive teaching. For example, scholars (Engelbrecht, Swart & Eloff, 2006; Mdikana, Ntshangase & Mayekiso, 2007) also reported on positive sentiments they received from teachers towards inclusive education. In one example, scholars'

(Engelbrecht, Swart & Eloff, 2006) findings reflected that when teachers felt professionally empowered and supported, they were more amenable to the demands of inclusive teaching. Also, Mdikana, Ntshangase and Mayekiso (2007) concluded from a study that in general, teachers responded positively to inclusive education and its application in classroom settings.

Although negative teacher attitudes towards inclusive education were heightened in the post-apartheid era they were not only applicable to South African society. This specific research theme reflects work from around the globe. For example, scholars (Avramidis & Norwich, 2002) bring to our attention research that highlights negativity and feelings of self-doubt or personal incompetence, intrinsic to educators, when these teachers are directed to implement inclusive teaching practices in their classrooms. Also, in many cases, prevailing teacher attitudes correlated directly with the amount of physical or human resources available in a given school, in-service and pre-service teacher education, and the nature and/or severity of the disabling condition of the child (Avramidis & Norwich, 2002; Avramidis, Bayliss & Burden, 2000). Finally, scholars (Campbell, Gilmore & Cuskelly, 2003) reported that raising awareness of disability or different learning needs may lead to changes in teachers' negative attitudes toward disability.

2.4.2 Teacher attitudes and self-efficacy discussions from the more recent literature

Teacher attitudes towards inclusive teaching have continued to dominate the discourse in the field of inclusive education in more recent times, with similar conclusions to those mentioned above, being reached. This speaks to the confusion and feelings of under-preparedness that teachers have towards the expectations required of them when having to teach in inclusive settings. After more than twenty years of inclusive education being a part of the structures of the education system in South Africa, it seems that relevant stakeholders have still not adequately addressed the issues that lead to the negative teacher attitudes towards inclusive teaching. However, scholarly contributions from recent literature (Donahue & Bornman, 2015; Nel et al., 2011; Walton & Rusznyak, 2017) suggest that there is a discernible interest in finding solutions to the many issues around negative teacher attitudes. For example, Oswald (2006) considers developing teacher education models that will focus on the emotional stress factors that teachers face in the inclusive classroom. While scholars (Donahue & Bornman, 2015) argue that changing teachers' negative attitudes will require effective implementation of educational policy on inclusive education by the South African Department of Basic Education, other scholars (Swart & Pettipher, 2007) suggest that both individual and collective learning is

necessary for a change in teachers' attitudes to inclusive education. Achieving change in classrooms requires an understanding of the social origins that drive change and that a focus on socio-economic factors is necessary to shift teachers' negative sentiments towards inclusive education to a positive orientation (Nel et al., 2011; Walton et al., 2014).

These findings from the literature indicate a shift in focus from only the identification of negative attitudes of teachers towards inclusive education towards finding possible solutions to change these negative attitudes. However, the fact that scholars (Donahue & Bornman, 2015 & Nel et al., 2011) continue to carry out studies on teacher attitudes to inclusive education, where findings indicate that teachers have a negative attitude, informs us that despite nearly thirty years of research and implementation of inclusive education policy (including White Paper 6 and the SIAS (2014)), there is still a long way to go to realise the aspirations of the Salamanca Statement (UNESCO, 1994).

There is evidence in more recent research (Engelbrecht, Savolainen, Nel, Koskela & Okkolin, 2017) that advocates for a more pragmatically orientated response to teachers' feelings of under-preparedness and negativity for inclusive teaching coupled with their continued adherence to medical/individual model ideas. For example, some researches (Walton & Rusznyak, 2017, p. 238) are looking at "practical skills needed for working with diverse students and learning needs" within the context of pre-service teacher education. They are interested in whether teachers are adequately equipped with the knowledge and technical skills from their pre-service education to meet the needs of a diverse learning community (Walton & Rusznyak, 2017). Also evident in the literature is a focus on teacher education that provides applicable classroom pedagogical responses that can be used in inclusive classroom settings to counteract negative sentiments and feelings of under-preparedness. For example, Walton et al. (2014, p. 319) report on how teacher educators are concerned with how to educate teachers to be "pedagogically responsive" to a diverse learner population. This could offer a solution in changing the disposition of teachers from a negative narrative to a positive outlook on how to meet the challenge of teaching learners with a range of different learning needs. Some studies examine the practical experiences afforded to teachers when receiving their pre-service teacher education and how this exposure can complement the theoretical information received at training institutions. Walton and Rusznyak (2013) explore how pre-service teacher placement in special schools allowed for their abstract, theoretical or tacit aspects of their teaching practice development to become more explicit to them (Walton & Rusznyak, 2013, p. 112). Walton and Rusznyak (2014) further suggested that pre-service teacher exposure to practicum placement

in special schools allowed them to grow in their understanding of a wide range of different learner needs and plan their lessons accordingly, to enable them to develop instructional strategies to enable learning for all the learners in the classroom.

Finally, researchers have investigated the role of external support specialists as a solution to negative teacher attitudes to inclusive education. For example, it has been argued in international and South African literature (Florian & Spratt, 2013; Nel, Nel & Leboloane, 2012) that interdisciplinary collaborative activities between stakeholders is an effective strategy to ensure that inclusive education practices are implemented in classrooms. However, a recent study by scholars (Nel, Engelbrecht, Nel & Tlale, 2017) reveals that the anticipated benefits to the implementation of interdisciplinary collaboration between stakeholders are tempered by contextual challenges in schools, the teachers' low self-efficacy, an absence of any clear understanding of the ideas behind inclusive education and a lack of support for teachers by relevant structures in schools and society.

This pragmatic focus in the literature suggesting inclusive teacher education programmes or approaches to empower teachers to be effective and confident inclusive educators is reflected in the international literature. It is argued by scholars (Florian & Black-Hawkins, 2011; Florian & Linklater, 2010a) that a lack of teacher knowledge about inclusive teaching is a significant barrier to the achievement of inclusive education directives in schools. This has a subsequent negative knock-on effect on teacher attitudes. It is also argued by scholars (Florian, 2008) that research that sets out to identify the skills and knowledge necessary for teachers to enable them to implement inclusive teaching practices are limited.

Another trend from the recent literature suggests a consideration of research at different research sites with varied cultural contexts. For example, Malinen et al. (2013, p. 36) conducted research "to find out which teacher-related factors predict the self-efficacy of Chinese, Finnish, and South African teachers for inclusive practices." Scholars (Malinen et al., 2013, p. 35) argue that research findings across varied cultural contexts conclude that "teacher self-efficacy is a multidimensional construct" and not causal. From the evidence presented in the literature there is recognition that many studies into teachers and their feelings of efficacy are often narrow in scope and reliant on cause-and-effect and linear research designs. It can be argued that a study that is narrow in scope and only considers isolated individual instead of collectives and networks runs the risk of producing results that do not adequately consider the impact or effect of other factors in the greater environment (Engeström, 2014).

By looking at the interconnected relationships between components within a school, embedded within a social system, and considering the impact of other activity systems in society (departments of education and teacher education institutions for example) researchers are able to examine the tensions or contradictions that are causing teachers to have feelings of low self-efficacy when teaching. For example, scholars (Gutiérrez, Engeström & Sannino, 2016) consider teacher activity in their schools through the theoretical lens of CHAT. Through CHAT these scholars propose that teachers and their teaching should be considered broadly, where research "goes beyond classrooms and schools entering a variety of communities, activities, and social movements that are seen as potentially significant sites of learning and education" (Gutiérrez, Engeström & Sannino, 2016, p. 282). Through CHAT inclusive education can be analysed in terms of outcomes, the impact of the constituent communities, the divisions of labour (leadership structures) and societal rules and the tools (teaching skills, pedagogy, and training) that inhibit or promote teachers' ability to effectively operate within their contexts. It is suggested by scholars (Engelbrecht, Oswald & Forlin, 2006; Oswald, 2010) that using CHAT could allow for research to identify correlations between teachers' ability to perform as inclusive educators and their relationships to components in their respective school contexts. Similarly, findings from Walton, Nel, Muller and Lebeloane (2014) suggest that a 'complexity theory perspective', as described by Opfer and Pedder (2011, p. 388), can be used as an effective and illuminating theoretical framework when considering teacher dispositions to inclusive teaching, their feelings of competence, their pre-service teacher experience and the institutional contexts in which they teach.

Other reasons have been suggested in the literature as having a negative impact on teacher efficacy. For instance, Ekins, Savolainen and Engelbrecht (2016, p. 246) describe how teacher dimensions of self-efficacy are directly linked to teachers' "knowledge of laws and policy" related to special educational needs and disability, their "meaningful experience of teaching learners" with disability and the extent to which they communicate and collaborate with colleagues and parents. Ekins et al. (2016, p. 246) conclude that there is a need to address teachers' ability to develop "collaborative professional partnerships" to assist them in understanding ways they can be supported to meet the needs of learners with a range of learning needs in their classrooms. Scholars (Malinen et al., 2013) conclude that within the South African context, inadequate teacher education and a lack of experience in teaching to diversity pose the key challenges to self-efficacy in inclusive education. Malinen et al. (2013, p. 43) argue that the amount of interactions that teachers have with people who have disabilities is a

"potential source of mastery experiences" which has a positive role to play in teachers' development of self-efficacy. What this intimates is that the more recent research is going beyond bringing to our attention the issue of low teacher self-efficacy for inclusive teaching in South African schools and is being proactive in suggesting areas of focus to improve it.

From the literature reviewed above it is apparent that the issue surrounding teachers and their ability to implement inclusive teaching strategies has attracted a considerable amount of attention over a twenty-year period. What has emerged from the literature is that researchers are attempting to provide theoretical and practical solutions to positively influence teachers' attitudes and sentiments and improve their self-efficacy.

2.5 Conclusion

The literature review has first, shown me that research on inclusive education, both in South Africa and internationally, continues to be a topical and keenly contested area of debate. The second finding was that although researchers have been conducting research in the field of inclusive education for well over twenty years there are many topics that are perennial and remain relevant for research in this era. Another conclusion reached was that many of the studies reviewed were small in scale and involved research that dealt with limited groups of individual teachers or learners in school communities. What was seen to be limited in the literature were large-scale systemic work around contested issues that included for example, models of teacher education for inclusion in South Africa (Walton & Rusznyak, 2014). This observation by scholars (Walton & Rusznyak, 2014) supports the conclusion reached by Florian (2012a, p. 217) who argues that globally there has been little evidence of research that has been rigorous, empirical or "systemic on teacher preparation and continuing professional development for inclusive education." In the next section I review the literature of studies that engage with the ideas of inclusive teaching and how they might be recognised in practice in inclusive classrooms.

CHAPTER 3

LITERATURE REVIEW: WHAT IT MEANS TO TEACH INCLUSIVELY

3.1 INTRODUCTION

It is worth mentioning that in the quest to create inclusive learning spaces, Slee (2019, p. 13) argues that inclusion and belonging must be an "operational value" and an "organising practice" for educational accountability and teaching. Within the South African context there are policies and directives that explain the expected role and function of teachers in inclusive classrooms that aim to operationalise the practice of inclusive teaching. For the purpose of this thesis I have focussed on the South African Policy on Screening, Identification, Assessment and Support (henceforth known as SIAS) (2014) that outlines the role of teachers in schools. The SIAS policy is the first in South Africa since the ratification by Cabinet of the Convention on the Rights of Persons with Disability (2007) to direct how there will be no rejection of learners on the basis of a disability. The organising principle behind SIAS is for every learner to have the right to receive quality basic education and support within his or her local community and where every learner has a right to receive accommodation in an inclusive classroom. This aligns with the objectives of this research project where I explored constraints and affordances to inclusive teaching in local community settings found in local schools and classrooms in South Africa. In this study, I am concerned with what it is exactly that is intrinsic to teachers and extrinsic to the environment of the school and the wider community, that negatively impacts on the rights of learners to have their different learning needs accommodated in an inclusive learning environment. SIAS considers factors which I feel are important constituents of inclusive teaching.

SIAS stipulates the following:

> Learning programmes and materials as well as assessment procedures must be made accessible to all learners and, must accommodate the diversity of learning needs in order to facilitate learners' achievement to the fullest. (SIAS, 2014, p. 34)

It is evident that the stipulated requirement for teachers is to develop their teaching and assessment processes to be fully accessible to all learners and their range of different learning needs in their classrooms. The SIAS statement (2014) calls for teachers to facilitate the achievement of all learners and not most at the expense of some. This aligns with the arguments

from scholars (Florian and Black-Hawkins 2011, p. 820) who propose that teachers need to develop a teaching 'pedagogical approach' that is accessible to all learners and should not be at the expense of some learners who are thus not included. In this chapter I put forward the argument that consideration of curricula, learning materials and the way in which the curricula dictate that learners can be assessed is vital to successful and effective inclusive teaching.

Another stipulation of SIAS (2014, p. 34) states:

> Teachers must take care not to label learners who are identified for additional support, thereby promoting exclusionary processes.

What SIAS (2014) shows is that under these policy directives teachers are not to make predetermined judgements about learners' abilities and create categories that exclude some learners from others. "The SIAS process outlines how the process of screening, identifying and assessing learners for eligibility to receive additional support in special schools or sites is to be replaced by structures that acknowledge the central role played by teachers, School-Level support teams and parents (Education White Paper 6, 6.7)." This statement from the WP6 shows how teachers must maintain an active role in the lives of all children in their care, rather than using assessment tools or methods to segregate children and direct them to special needs facilities. I explain in this chapter how, for inclusive teaching to be realised in the classroom, the mindset of the teacher has to be one where he/she has an orientation that believes that every child has the ability to learn rather than see learning ability as fixed entity.

Also mentioned in the SIAS (2014, P. 34) policy is how teachers and school systems must to be aware of how their attitudes and their working environment must change to meet the needs of all the learners.

> A change in attitudes, behaviour, teaching methods, curricula and environments are needed to meet the needs of all learners.

This statement highlights, together with the other quotes discussed here, the need for a shift in thinking by teachers about how to meet the needs of all learners where they take up the challenge of teaching children with a wide range of learning needs in classrooms across South Africa. This shift in thinking involves both a change in teacher practice and in attitude towards teaching learners with a range of different learning needs. This is further reiterated in the SIAS (2014, p. 34) policy where it states that the teacher's role in the classroom is "Maximising the participation of all learners in the culture of curriculum of schools and

uncovering and minimising barriers to learning." These are identified as the central objectives of the SIAS policy.

Finally, the SIAS (2014) policy refers to how the information that is acquired from external assessments should only be used by educators for the purposes of enhancing the understanding of the interventions that might be needed for a child and that these should not be central to the decisions made for support. Therefore, this role of external assessment places the function and responsibility with the teacher in designing lessons that are accessible for all learners and not as a tool for the exclusion of learners from the learning process and for labelling learners with a medically determined disorder.

Scholars (Walton, 2015; Greenstein, 2014; Florian, 2015b; Florian & Black-Hawkins, 2011; Nel, Tlale, Engelbrecht & Nel, 2016; Ainscow & Cesar, 2006; Nilholm & Alm, 2010) have offered descriptions and conceptual frameworks on what inclusive teaching means and how it translates into classroom practice. The literature reveals that there are three interconnected dimensions necessary for inclusive teaching. These are an orientation of teaching inclusively; instructional practices of inclusive teaching; and considerations of an environment conducive for inclusive teaching. Inclusive teaching operating at the confluence of many factors of inclusive education is mentioned in the Global Education Monitoring Report GEMR 2020 Concept Note (Andrews, Walton & Osman, 2019). It is explained in the GEMR 2020 Concept Note (p. 4) that

> These elements can include the content of education and learning materials, teaching and teacher preparation, infrastructure and learning environment, community norms, and the availability of space for dialogue and criticism involving all stakeholders.

In the sections that follow I discuss the three interconnected dimensions of what is required for inclusive teaching.

3.2 An orientation for inclusive teaching

In Chapter Two, literature that addressed teachers' attitudes towards inclusive teaching is discussed. The findings showed that for various reasons in the majority of studies under review, teachers had negative attitudes towards inclusive education. In this chapter I consider the critical importance for teachers to have a positive and proactive orientation towards inclusive teaching if they are to be able to be authentic inclusive educators who create inclusive learning

environments. I argue that not only does inclusive teaching require a set of specific skills or instructional practices that teachers need to utilise in their classrooms when teaching to learners with a range of different learning needs, but that their attitude and philosophical outlook on learner difference is equally important.

Inclusive teaching requires teachers to have an orientation towards learners and their learning experiences that is congruent with the central ideas of a human-rights thinking. This is enshrined in United Nations Convention on the Rights of Person with Disabilities (UNCRPD, 2006) that established the rights of people with disabilities to enjoy the inherent right to live their lives on an equal basis with others. These rights cover most aspects of daily life for children, including their right to attend school and to an inclusive education that recognises and meets the range of different needs of all learners be they of social, emotional or cognitive origin. Article Twenty-Four of the UNCRPD (2006) represents a move away from a medical/individual model of disability and rather adopts a human rights model. Kanter (2006) argues that the human rights model views children as 'rights holders' who are often more disabled by the physical and attitudinal barriers that society imposes to further stigmatise them. Understanding what it means to have an orientation for inclusive teaching is complex and a variety of ideas must be considered. These ideas include an orientation towards human rights for all children to access equal learning opportunities; considerations of why some children are considered different from others; understanding the concept of a transformative mind-set towards learning opposed to a fixed mind-set towards learning; and what it means to demonstrate critical reflexivity to drive change (Kanter, 2006).

3.2.1 Teacher attitudes to learner difference for inclusive teaching

Inclusive teaching requires the acceptance of all children as being fully capable of learning. Scholars (Shulman & Wilson, 2004; Rouse, 2008) refer to *heart issues* as the ethics and morals that a person ascribes to in his/her profession. One way of understanding *heart issues* for inclusive teaching is to consider those heart issues that are not found in the school space in order to gain a clearer perspective. Scholars like Fricker (2015) explain that to know what justice and equality look like it would be a useful exercise to examine what counter-measures are needed to stave off a collapse into the opposite reality of injustice and inequality. For example, an orientation towards social justice and equality does not advocate for the segregated placement of learners deemed not to fit in with regular school constructs (Slee, 2011). Therefore, inclusive teaching is an experience where both learners and teachers increase their

tolerance, understanding, the value of difference and the rights of everyone to participate in a just and fair education community without exclusion or segregation (Boyle et al., 2011; Anderson & Boyle, 2015; Dixon & Verenikina, 2007).

Scholars (Osman & Hornsby, 2018, p. 398) describe the teaching and learning approaches that need to be specifically "tailored so as to overcome institutionalised exclusions if we are serious about transforming society." Scholars (Osman & Hornsby, 2018; Liebowtiz, 2009) explain that a broader, or more encompassing vision for 'teaching and learning for social justice' considers a recognition of the factors that include; the distribution and allocation of human and physical resources, fostering of participation and collaboration between stakeholders, and the recognition of identity, cultural affiliation and social status into our teaching if we are to consider our teaching interactions to be inclusive.

Teachers need to recognise that all children have a right to feel secure in their learning environment. In secure schooling environments (school and classroom spaces) children develop a positive self-esteem and feel recognised as an equal member of society and the learning space. Osman and Hornsby (2018, p. 398) describe how an element of teaching and learning from a social justice perspective needs to consider how teachers ensure that learners "feel safe and welcome within an institutional teaching and learning space." Adopting a social justice perspective challenges the malevolence of inequality that exists amongst learner populations, specifically when it comes to different environmental circumstances, personal identity, and cultural affiliation. It is therefore important to recognise the inherent dangers associated with condoning inequality when devising instructional practice and consider how this can detrimentally affect the learning space.

Some researchers suggest concrete ways in which the conceptual ideas of a social justice orientation to teaching can be articulated into inclusive instructional practice. For example, Kiguwa (2018) argues that teaching for social justice can be both an affective orientated practice and an action orientated endeavour. Teaching for the ideas of social justice requires that teachers and learners relinquish social attachments and identities and explore new spaces of engagement. One component of social justice education revolves around teaching learner's ideas of critical thinking to enable and empower them to ask questions about alternatives to the social realities they are used to in society. The development of critical thinking skills and engaging in multiple opportunities in class to question societal norms that exist in our environment and confront them through open dialogue can assist learners and teachers to

become more tolerant of difference and embrace the potential that difference can have to enhance other lesson activities. Kiguwa (2018) also suggests that another component of an action orientation to teaching for social justice is for both the teachers and the learners to engage in continuous self-reflection where they challenge the tendencies we often have to normalise specific identities and social relations as natural to us. This type of critical reflection of our ingrained beliefs about certain identities can allow learners to gain a different perspective of the world in which they live and the lives of the people they interact with at school, home and in society. Teachers can critically reflect on their own internalised understandings of disability and see difference in learners as a social construct rather than a medical deficit and intrinsic attribute labelling a child. The medical model of thinking about learner difference is unpacked in the next section.

3.2.2 Bell-curve thinking

Scholars (Florian & Black-Hawkins, 2011; Hart, et al., 2007) argue that bell-curve thinking is associated with deterministic beliefs held by teachers about learner ability. The danger of having a deterministic mind-set towards a child's learning ability or potential is that teachers then have a predetermined supposition that any future learning potential of a child is determined by their present performance. The result of this way of thinking about learner ability is that there is an ever present danger that a learner's present level of academic ability becomes fixed in the mind of the teacher, which is then seen to predetermine the child's future learning potential. This deterministic way of thinking about a learner's potential negates any consideration of any extenuating social or environmental variables that could have a decisive role to play in the child's present circumstances and thus impact on his/her academic performance. Where a teacher sees a learner's inability to access the lesson as the child's own internal problem, based on the ideas of a medical model that are fixed and unable to be changed, making the child in question seem different to others, implies that this child only has a certain functioning level in the class of his/her peers. This type of thinking about children and their ability implies that there could be a statistical mean representing a benchmark that can be distributed on a "bell-curve" (Florian, 2012b, p. 280). This type of thinking or mind-set sees the teacher pitching the lesson to the majority of learners in the class, who are represented by the main 'bulge' in the curve, with the result that the minorities of children in the class, on either side of the bell curve, are marginalised from accessing the lesson.

Scholars (Florian & Black-Hawkins, 2011; Spratt & Florian, 2015) suggest that inclusive thinking provides an alternative to the teaching practices and orientations associated with a bell-curve mind-set. Inclusive teaching decreases a teacher's reflex response to identify learners' as having internally determined and fixed learning differences negatively affecting their learning potential that then require referrals for external support. Scholars (Hart et al., 2007) identified teachers who had replaced 'fixed' learner ability thinking with an alternative mind-set. Hart, Dixon, Drummond and McIntyre (2004, p. 165) identified the alternative mind-set as encompassing 'transformability.' This idea of 'transformability' is an alternative concept as opposed to traditional "ability level thinking that assumes a stable relation between a learner's present abilities and their future abilities. In other words, ability level thinking assumes that 'more-able' and 'less-able' learners will retain their ability levels into the future and that these ability levels are innate and internal to everyone" (Hart et al., 2004 p. 6). Teachers who are orientated to a transformability mind-set have a conviction that there exists the potential for positive change in all learner patterns of achievement and response (Hart et al., 2004, p. 165).

Addressing issues of teacher attitude towards learner potential has been examined in Chapter Two. Overcoming a medical or individual model of thinking about a range of different learners' needs and subsequent bell-curve thinking requires an attitudinal shift, where teachers see different learning needs in children not as a problem but as opportunities for enriching learning. Attitudinal shift in people can be difficult to achieve, as this is often intrinsic to how people see the world in which they live. Some researchers suggest methods to overcome reductionist thinking. For example, Gunn (2003, p. 131) refers to "anti-bias education" or programming. In anti-bias programming people are taught to see that every child has value and can contribute in a positive manner to the learning process and who can also be active and competent learners who can contribute to knowledge. This happens though reciprocal action and interaction between people, places and things (Gunn, 2003). To achieve this, the teachers must look inward to understand how global and local histories have shaped their own levels of bias. Gunn (2003, p. 137) argues that through a process of "critical thinking" and self-reflection teachers will be better able to respond to exclusionary practices within their teaching context and thus be better able to implement inclusive teaching in their classrooms.

Having an orientation towards inclusive teaching where teachers align with a social justice perspective and, where they are cognisant of the limitations of the medical model and its propensity to marginalise learners and where they challenge bell-curve thinking, will have the

intended consequence of informing the choices that they make in the classroom (Osman & Hornsby, 2018; Nind, 2017; Florian & Black-Hawkins, 2011). I argue that this innate cognitive orientation has to be in place before a teacher can effectively apply the instructional practises for inclusive teaching that I outline in the next section.

3.3 Instructional practices for inclusive teaching

In this section, I discuss ideas about what inclusive teaching is and how this form of teaching presents in a practical manifestation in classroom teaching scenarios. There have been numerous scholarly research contributions that identify practical examples of inclusive teaching.

I saw it as important to examine an 'organising principle' to provide a guide or framework to what could be considered inclusive teaching and thus to also eliminate what was deemed not to be inclusive teaching. The decisions as to what kinds of teaching fit with each type of teaching practice is determined or informed by the literature discussed in this section. In its simplest form Alexander (2009, p. 6) explains that the 'practice of teaching' can be summed up as: teaching in any environment is the act of using method X to enable learners to learn Y. From this, Alexander (2009) asks two questions: first, what are learners expected to learn? Secondly, what method or instructional practice does the teacher use to ensure that they all do learn? For the purposes of this investigation, I assumed that the observational act of inclusive teaching was where the teacher participants used method X in their lesson to enable *all* (Florian, 2015) the learners to learn Y. In the sections that follow I describe various practices that are applicable to my definition or conceptual understanding of what constitutes inclusive teaching and how these methods are executed in the classroom environment as method X to enable all learners to learn Y (Alexander, 2009).

3.3.1 Differentiation

According to Loreman et al. (2010), thinking about differentiation and its practical nuances is important because in no country is the regular, externally prescribed curriculum appropriate for all learners in the form in which it was published. Scholars (Loreman et al., 2010) surmise that a defining activity or function of an inclusive teacher is to draw from the curriculum they are directed to adhere to and translate or adapt it into learning activities that are meaningful, relevant and accessible to *all* the learners in the class and not most at the expense of some.

Differentiation is considered to be a complex strategy with many constituent components that allow teachers to be more responsive to a range of individual learners' needs (Walton, 2017b). Differentiation is described in the Universal Design of Learning (UDL) as based on "neuroscience" and driven by the ideas of the social justice model where teachers are required to develop instructional practices designed for all learners that promote access to lesson activities and full participation rather than some children needing separate learning programs (Katz, 2013, p. 157). Scholars (Florian & Black-Hawkins, 2011) argue that considering the unique needs of the individual learner and thinking about what it is that will allow them to access the lesson so that all the learners are active, productive participants is central and salient to the ideas of differentiation as a means of teaching. In other words, differentiation is more than just a set of instructional practices. Wormeli (2007) argues that differentiation requires a mind-set shift that grasps the potential and the need to liberate learners from the challenges that constrain their learning and in doing so create opportunity for all.

UDL is promoted in the literature as a "philosophy, framework, and set of principles for designing and delivering flexible approaches to teaching and learning that address student diversity within the classroom context." (Capp, 2017, p. 791). The Universal Design for Learning is framed by three underlying principles, which are congruent with the ideas of inclusive teaching strategies of differentiated learning discussed in this section. Capp (2017, p. 792) describes how "the philosophy of UDL is based on the idea that there are multiple ways of representing knowledge (principle one), multiple ways students can demonstrate their understanding (principle two), and multiple ways of engaging students (principle three)." Scholars (Ok, Rao, Bryant & McDougall, 2017, p. 19) illustrate, that results of a review of studies of teachers who applied principals of the UDL to their teaching, show "that UDL-based interventions are effective for addressing learner variability and thereby increasing access to curriculum for diverse students in Pre K-12 settings." These findings are congruent with the research by Lowrey, Hollingshead, Howery, and Bishop, (2017, p. 236-237) who report on "descriptions of planning for learner variability as core to their experiences in the implementation of UDL in inclusive classrooms."

It is important to consider that while many teaching practices have the intention of including learners, the unintentional effect is the exclusion of learners from lessons (Florian, 2012b). A scenario of unintentional exclusion is seen in this short vignette: A teacher differentiates activities and guides a learner to complete a chosen task. However, the teacher runs the risk of setting work or activities which have the unintentional counter-effect of excluding them from

the subject content or central skills prescribed by the curriculum. These learners are at a further disadvantage as they now will have gaps in their knowledge that have the potential to be detrimental to future learning opportunities that will require the known knowledge that they were excluded from.

Differentiation requires a teacher to have a broad interpretation of the range of different learning needs that he/she is presented with in a classroom context. Traditionally, an understanding of diversity and a range of learning needs was narrow in scope and only considered barriers to learning that were limited to cognitive or physical issues (WP6). Sapon-Shevin (2013, p. 58) argues that children differ in many ways "and that to think about education that is inclusive and responsive to one set of differences (called disabilities) and to ignore differences of race, ethnicity, gender, sexuality, language, religion, and class doesn't create an educational system that is truly inclusive of all."

It is useful to understand what differentiation is not. Scholars (Florian, 2015b; Loreman et al., 2010) argue that differentiation as a teaching practice is not where teachers place learners in ability groups, for example, where they are then assigned different tasks according to their subjectively presumed level of ability. Scholars (Florian, 2015b; Loreman et al., 2010; Florian & Black-Hawkins, 2012) argue that this approach to teaching takes away the 'learner choice' that should be available to learners when differentiation is practiced.

Scholars (Tomlinson et al., 2003) describe differentiation as an approach to teaching where the educator proactively modifies the prescribed curriculum to maximise the learning opportunities for every learner. This is achieved by adapting teaching practice, utilising available resources, modifying and individualising classroom activities and adapting assessment techniques and materials for every child. Tomlinson (2005, p. 267) explains that differentiated instruction allows the teacher to provide "learning opportunities that are appropriately challenging" for all learners by providing materials and tasks at varied levels of difficulty, with varying degrees of scaffolding, through multiple instructional groups, and with flexible time variation. Tomlinson (2005) outlines various practical underpinnings as to what, in my opinion, constitutes differentiation. They include: first, the teachers' actions in the class should involve a balance between whole-class teaching, group interactions and individual attention where learning experiences are both challenging and safe. Here learners are limited from being stigmatised or having them struggle with one medium of instruction on a continuous basis. Secondly, lesson outcomes are clearly defined to ensure focus on the essential knowledge or skill required by

the curriculum. This ensures that items of the curriculum are not omitted from one learners' experience, as this in-itself becomes an exclusionary process. Thirdly, ongoing assessments and pre-assessments coupled with reflection-action-reflection performed by the teacher will extend the teacher in creating meaningful activities for individuals that all learners can benefit from. Fourthly, teachers use their available teaching time, physical space and a variety of different lesson presentation techniques in a flexible manner to ensure that they address a wide range of learners with different learning needs. Finally, classrooms become communities-of-learning where learners share, with the teacher, the responsibilities for mutual respect and optimum academic growth (Tomlinson, 2005). Tomlinson (2005) argues that differentiation practices should be an enhancement to the prescribed curriculum and not a replacement for it.

On a practical level differentiated teaching practices have been outlined by scholars. For example, Valiandes (2015) explains how teaching must be focussed on the learning process rather than on delivery of content; the teaching needs to provide a range of further learning tasks that range in difficulty, while not lowering academic standards instead maintaining high standards for all, and finally, the evaluation of learning tasks should celebrate mistakes made by learners and see mistakes as learning opportunities to construct new knowledge that can benefit all the learners (Valiandes, 2015).

Other researchers also suggest ideas for how teachers can use differentiation techniques in their classrooms. For example, Loreman et al. (2010) provide a range of practical ideas that can be used for differentiation through their focus on what they refer to as the 'materials environment.' First, the scholars suggest that teachers increase the readability of written passages by enlarging the print and using graphic prompts in the text. Secondly, they should reduce extraneous details and simplify the layout of the text. Thirdly, they can reduce the amount of material selected and simplify the language used. Finally, the teacher should use a variety of different materials in the lesson, rather than rely solely on print. Loreman et al. (2010) also point to a variety of teaching strategies for differentiation. These include: differentiation of the time to complete tasks according to individual needs; asking questions at different levels of complexity for different learners; incorporating individual talents of learners into the lesson; incorporating self-management strategies into the lessons; allowing for a variety of modes of responses from the learners rather than relying on written or spoken responses only and; providing hints, cues and clues as a scaffold to facilitate learner contributions to the lesson activities. Finally, Loreman et al. (2010) suggest that differentiated instruction involves the teacher changing the pace of instruction, increasing the 'wait time' for learner responses, shortening the instructions

given, repeating the key elements of the lesson and interacting more frequently with guided practice and seeking out regular feedback from all the learners.

One of the challenges for teachers when it comes to inclusive teaching is making the curriculum accessible to all learners, considering that the content and targets are externally derived and cannot account for the unique diversity that every different learning context presents. Engaging with this challenge has been addressed by scholars. Griggs and Medcalf (2015) explored making activities accessible to all learners to improve the effectiveness of inclusion of all learners in physical education lessons. Also, McGhie-Richmond and De Bruin (2015) explored the creation of environments for learning with opportunities in the form of differentiated activities that were made available to everyone and where all learners could participate in classroom life in Technology lessons where the latter had to adhere to the prescribed curriculum – a curriculum externally imposed by the relevant department of education.

3.3.2 Learner selected activity choice

Florian and Black-Hawkins (2011) describe an inclusive teaching strategy that provides learning situations where learners can direct their own learning through independent choice making. This is achieved when learners are trusted to make decisions in the classroom that they feel benefit them. The intended objective of trusting learners to make their own decisions is "that learners' needs are met but individual students are not marginalised within the class" (Florian & Black-Hawkins, 2011, p. 822)

Learner-selected-activity-choice draws its theory from the literature (Hart et al., 2007). For teachers to have the mind-set to allow learners to direct their own choices and take control of their own progress and learning requires that they have a certain view on the potential of learners to learn. Hart et al. (2007) speak of the inclusive teacher having a 'transformability mind-set' instead of a 'fixed mind-set' towards children and their potential to learn. Hart et al. (2007) speak of principles that are necessary for a teacher with a transformability mind-set. For example, the principle of *trust* assumes that learners can be trusted to make meaning of their learning experiences and to participate independently in worthwhile activities. In the framework of the Learning Without Limits programme, scholars (Florian & Linklater, 2010b) speak of creating spaces for teachers to be surprised at how and what their learners learned. Not all scholars are in favour of allowing learners to choose their own activities in class. Norwich (2013) argued that there always exists the danger of learners selecting inappropriate activities, either by selecting activities that were too difficult or ones that were too easy.

Florian and Black-Hawkins (2011, p. 820) describe two inclusive instructional practices that fit with the ideas of providing learners with activity choices during their learning. These instructional practices include; "*work choice* and *play zone*." Using the *work choice* strategy, the teacher collaborates with colleagues to find out how to differentiate or modify curriculum materials and associated academic tasks so that specific accommodations for learners with a wide range of different learning needs can be met. These chosen varieties of tasks are then made available to the whole class to choose from within a lesson context. The next step in the process sees the learners then choose how, where, when and with whom they intend to learn. By using the *work choice* technique learners are *trusted* (Hart et al., 2007) to make their own decisions about their learning and teachers present options and consult with each learner around how they can support them in the completion of their task (Florian & Black-Hawkins, 2011, p. 821). Within the instructional practice of *play zone,* the teacher creates a physical area in the classroom with a range of "active play choices" available for the learners. Teachers then select play activities that are appropriate to the individual needs of each learner. From this point on the *play zone* area becomes a space where the learner directs their own learning. The *play zone* area of the classroom is a space where learner activity selection and learning are self-directed and promote independence (Florian & Black-Hawkins, 2011). This opportunity to gauge and assess academic or physical progress removes the stressful situation where a learner is consciously aware of the fact that he/she is being assessed or that his/her peers are watching (Florian & Black-Hawkins, 2011).

3.3.3 Co-teaching for inclusive teaching

Co-teaching is defined in the literature (Gurgur & Uzuner 2011) as when a teacher engages with other stakeholders who come into the classroom space and assist with the inclusion of learners into activities. Co-teaching can be further defined as where there is more than one adult in the classroom assisting the teacher with individual and group learning scenarios. The additional person provides the teacher with support in the classroom with what he or she intends to achieve as a lesson outcome. Scholars (Gurgur & Uzuner, 2011) argue that co-teaching is an effective form of inclusive teaching that allows for all learners to better participate in general classroom activities. However, Gurgur and Uzuner (2011, p. 603) do suggest that "teachers who are going to use a co-teaching approach should be innovative, volunteer and be sufficiently experienced in the areas of planning and assessment." Co-teaching does not need to only rely on educational specialists or qualified teachers being in the classroom and can be any assistant or volunteer that has engaged in the process or mutual planning with the classroom teacher.

Scholars (Krüger & Yorke 2010) explain from a study the conducted in South African schools that a focus on collaborative co-teaching is a key to inclusive education. Krüger and Yorke (2010: p. 293) argue that "collaborative co-teaching requires the learning support teacher and the general education teacher to partner in all aspects of instruction." This study shows that co-teaching has relevance within the South African education climate.

A function of the co-teacher is to assist the class teacher with scaffolding strategies to assist learners in accessing the curriculum materials. One type of scaffolding mentioned by scholars (Radford et al., 2015) is referred to as the 'support role' of the co-teacher. Scholars (Rojas-Drummond et al., 2013; Radford et al., 2015) define the support role as including three functions when assisting a learner. First, 'recruitment', which is described as the process of getting a child involved, interested and excited about the learning experience they are involved in. Secondly, 'direction maintenance', which entails getting the learner to focus on the task at hand and ensure that he/she remains on task for the duration of the lesson. Finally, 'frustration control' which is an active and affective role where the co-teacher helps reduce the learner's anxiety or frustration during a task presentation or when the teacher introduces new materials or concepts into the lessons.

Modelling of actions in the classroom is considered in the literature (Loreman et al., 2010) to be another benefit to co-teaching when the supporting teacher provides scaffolded learning for children and works in unison with the classroom teacher. When learners observe their teachers in collaborative engagements with their co-workers it is a valuable technique when modelling the benefits of collaboration to enhance learning (Loreman et al., 2010). When learners observe collaborative moments in action they are better able learn from what they see and translate this into actions with each other to benefit their learning.

Co-teaching can have other practical benefits that enhance inclusive teaching. Loreman et al. (2010) explain these to be first, where the co-teacher can deliver teacher planned lesson materials to small groups in a supportive role to the teacher during whole class instruction scenarios. Secondly, co-teachers can be involved in supporting peer and self-assessments and make explicit the various success criteria of a planned assessment to the teachers they work with. Thirdly, co-teachers can assist with reflective processes which can include the ongoing recording and maintenance of how learners respond to the teaching and tasks (Loreman et al., 2010). Finally, the co-teacher can be asked to assist with specialist responsibilities for learners

with disabilities for example, this could include issues with eating, the modification of learning materials and mobility (Loreman et al., 2010).

3.3.4 Whole class instruction strategies with discovery-based learning

Whole class instruction is an inclusive teaching strategy that involves the teacher presenting activities in such a manner that all the children can access what the teacher is communicating and asking of them. Whole class instruction is also where the teacher involves everybody in the class activities and pays all learners equal attention without separating and marginalising them. Florian and Black-Hawkins (2011, p. 823) describe a feature of whole class instruction to be where the teacher makes an effort to "support the child to make progress and to experience success, within the context of the whole class." A feature of whole class instruction was noted by Spratt and Florian (2015, p. 93) who described how teachers were able to find an "everybody" response through their instruction to address individual learning difficulties faced by learners. This 'everybody' response ensured that all learners participated, and that respect for the "dignity" of everyone in the classroom was maintained (Spratt & Florian, 2015, p. 92).

Whole class instruction in inclusive teaching must also consider the personal interests of the learners who participate in each lesson. Scholars (Spratt & Florian, 2015) provide a practical example of whole class instruction. They give an example where a teacher decided to use examples of farming to contextualise a certain topic and how this would only work if the children were interested in farming. This then becomes the crux of the issue and the challenge for the teachers, as they must plan for the range of learning differences of individuals while always considering the planning of instructional practice for 'everybody' and the "circumstances in each particular classroom setting" (Spratt & Florian, 2015, p. 94). Spratt and Florian (2015) provide another practical example of whole class instruction. In this example, they describe how a teacher they observed in a study found ways to include a child who was first, hard-of-hearing and secondly, disinterested in participating in the lessons. First, the teacher wore a microphone while she taught, and through doing this all the learners benefited with the enhanced voice projection, including the child who was hard of hearing. Secondly, she incorporated visual aids into her class and lesson activities which were beneficial for all. Thirdly, she found out which topics were of the greatest interest to all the children and used these as the contextual basis to explain the curriculum materials. This teaching strategy focussed the child's attention, and had the added benefit of resonating with the rest of the class and also gaining their attention. This practical example of whole class instruction aligns with

the principles of scholars' (Spratt & Florian, 2015) interpretation of the Inclusive Pedagogical Approach. First, the opportunity was created for all learners to co-create new knowledge; secondly, the use of language expressed the equal value of all the children; thirdly, the teacher extended what was ordinarily available for all learners in the classroom rather than using instruction strategies that would be beneficial for most with something different or additional for certain individuals. Finally, focussing the teaching on what learners can do and understand, rather than on what they cannot promoted trust and improved learners' feelings of self-worth and competency.

What is clear from this discussion of the literature is that whole class instruction is about an 'applied principle' rather than a set of defined teaching methods. It is contextually bound to specific lessons and requires constant revision, as each teaching scenario is not necessarily replicable in another context. This is optimised by scholars (Corrigan & Smith 2015) whose research focussed on 'what is to be taught and how it should be taught' rather than who should be taught in science education contexts. Another example from the literature of whole class instruction, where the use of language expressed equal value of all the learners, could be found in the research of Agbenyegba (2015) who used specific 'language while teaching' to expand literacy and numeracy concepts in the lesson that expressed the values of all learners rather than only some. It needs to be mentioned that whole class instruction should not be used as the sole method of teaching in the lesson as it does have its limitations. Tomlinson et al. (2003) argue that whole class instruction should be combined with collaborative, small group settings and not utilised as the only method of teaching. They argue that whole class instruction does not allow the teacher the flexibility that small group settings would and surmise that it is easier to work with a range of learning needs when confronted with small groups of learners in the lesson.

3.3.4.1 Direct instruction as a whole class inclusive instructional practice

Direct instruction is a variant of whole class teaching. Direct instruction is appropriate where class sizes are large and subject matter requires an explanation of concepts, as in the case of mathematics instruction (Hattie, 2008). Direct instruction can be defined as a process whereby the teacher explains a concept to the whole class in a step-by-step manner. Scholars (Spratt & Florian, 2015) argue that direct instruction, when done according to the ideas of inclusive teaching, would need to be contextually bound to the challenges of addressing the different learning needs of a particular class of children. This would involve the teacher delivering the

step-by-step lesson in a manner that recognises the challenge of teaching learners with a range of different learning needs in the lesson. Considering the diversity of the different learning needs is what would make direct instruction an inclusive instructional practice where the teachers are 'change agents' and 'directors of learning' rather than a form of didactic teaching (Hattie, 2008, p. 26).

Furthermore, direct instruction has a highly specific framework and does not involve a teacher standing in front of a class and speaking through topic material. Mitchell (2015, p. 21) explains that direct instruction, for use in an inclusive teaching context, is a "multi-component instructional strategy centring on teacher-directed, explicit, systematic teaching based on scripted lesson plans and frequent assessment." Mitchell (2015) argues that direct instruction practices for inclusive teaching must be accompanied by structured lesson plans and frequent and varied modes of learner assessment.

3.3.5 Co-operative learning

Co-operative learning is described as an instructional method where teachers have learners work in small groups or in pairs in structured classroom activities. Co-operative learning is an instructional practice that has been deemed to be a successful method for including all learners in the lesson (Florian & Black-Hawkins, 2011; Loreman et al., 2010; Hattie, 2008). According to Mitchell (2015) co-operative learning is premised on two main ideas about learning. First, it recognises that when learners collaborate by working together, they often achieve results that are greater than the sum of their individual efforts or capabilities. Secondly, the idea is that through co-operative learning knowledge is socially constructed, where learners learn from each other in social circumstances.

It is important to clarify that co-operative learning must never be organised as an ability level grouping as this has the potential to segregate learners which only serves to aggravate exclusion in the classroom (Spratt & Florian, 2015). Scholars (Loreman et al., 2010) emphasise that when assigning learners to co-operative groups these learning groups should be heterogeneous and be purposively composed of learners from different backgrounds, cultures, genders and with different achievement levels. Grouping learners in this way has many advantages which include: a greater amount of differing ideas that can be presented for discussion, learners with better understanding of an activity or content may be more able at explaining these concepts which will be of benefit to the rest of the peer group, and in instances where learners interact with diverse peer-groups this can lead to greater acceptance and tolerance for a variety of

perspectives, which allows learners to develop tolerance and respect for others different to themselves (Loreman et al., 2010).

There are nuances as to how a teacher gets involved in co-operative learning, in regards to the support he/she offers to the working groups. Spratt and Florian (2015, p. 93) surmise that an inclusive pedagogy for co-operative learning does not offer a whole new set of applicable teaching techniques or practices, instead, it involves a 'joint exploration of an issue', where the teacher makes thoughtful choices supported by professional knowledge. Spratt and Florian (2015, p. 95) explain rather, how and when these different instructional techniques of co-operative learning can be chosen, so that they contribute to "class solidarity and minimise categorisation and determinism," which is the difference that matters for inclusive teaching.

Another advantage of co-operative learning is its potential to improve learners' socialisation skills and develop self-confidence. For many children who have endured negative experiences from classroom learning, as they have been the victim of segregation and isolation, co-operative learning provides them with an opportunity to engage in a social learning experience that is enjoyable and positive with regards to their feelings of acceptance and self-worth. Katz (2015) surmises, that through the creation of diverse, co-operative learner groups, that encourage engagement in higher-order thinking and inquiry-based learning, there is an ultimate improvement in learner engagement and socialisation and a decrease in the learners' feelings of alienation from the learning process.

Findings from research (Hattie, 2008) has shown that when children are pitted in competitive individualistic learning scenarios, that ultimately exclude certain individuals who fail or fall short when compared to others, they are less successful than those learners working in collaborative learning scenarios. What the results from Hattie's (2008) study reveal is that there is data to show that when using an inclusive instructional practice, the quality of the learning experience is not compromised.

Co-operative learning has a practical orientation with specific skills of instruction. It is much more than just organising learners into groups, or allowing them to choose groups and then allowing them to simply get on with their learning. Jolliffe (2007) explains, first, how co-operative learning requires a mind-set from the learners where they see that each group member needs the other to achieve the designated task. Loreman et al. (2010, p. 165) refer to "promotive interaction" which involves learners being encouraged to support each other's cognitive and interpersonal efforts, as they try to achieve the whole groups goals. Secondly, Loreman et al.

(2010, p. 165) refer to the concept of "positive interdependence" which is achieved when the shared goals of the group depend on the actions of every group member. Positive interdependence creates a commitment to the success of the whole group, which is then a commitment to the success of everyone and is at the heart of the definition of co-operative learning. Johnson and Johnson (2009) explain how interdependence between people exists when the outcomes of individuals are simultaneously affected by their own actions and the actions of others. Johnson and Johnson (2009) describe positive interdependence as occurring when the actions of individuals promote the achievement of joint goals that a group of people aspire to. Thirdly, for positive interdependence to be successful there needs to be a strong sense of individual accountability, where every member is required to complete their piece of the task. Loreman et al. (2010) explains how each learners' contribution is important for the collective success of the peer group and that individual assessments are essential for determining what each member of the group has achieved. These tasks and instructions need to be relayed to the group before the activity can begin and there must be clear role allocation within the group or accountability will be compromised. Therefore, Jolliffe (2007) argues that group allocated tasks need to be highly structured, to ensure that learners are interdependent and held accountable for their role. Fourthly, Loreman et al. (2010, P. 165) speak of a concept called "group processing" which refers to the overall functioning of the group and how well all parties function together. Group processing is achieved by the group, under the direction of the teacher, reflecting on what aspects of a given task went well, what did not work at all and what will be maintained or modified to enhance future tasks. Finally, Loreman et al. (2010) argue that for co-operative learning to be successful the learners need to be taught or mediated interpersonal and small-group skills. Interpersonal and small-group skills provide learners with the *how* to be successful in group activities. Interpersonal skills can be mediated through direct instruction and modelling examples by the teacher and include teaching learners to actively listen to others, accept responsibility for their actions, provide constructive feedback, contribute ideas, ask clarifying questions, paraphrase what others say for understanding and finally encourage others on their participation and development. The teaching of small group skills includes mediating learners to share resources and tasks, take turns, recognise that when they share tasks they can achieve more as a collective and also, assist learners in making democratic decisions (Loreman, 2010).

3.3.6 Assessment practices for teaching inclusively

Hardy and Woodcock (2015, p. 143) argue that greater attention needs to be placed on the "assessment practices" used by teachers in classrooms. Just as inclusive teaching must reflect decisions made by teachers that consider how to include rather than exclude children, so should the assessments that accompany the content delivery (Florian & Rouse, 2009). Also, where inclusive teaching must aim to reduce the reliance on hierarchical ideas of learner development that require teachers to make judgements about what is possible or not possible to learn, assessment must follow the same thinking (Florian & Rouse, 2009). It is argued by scholars (Villa et al., 2005) that traditional assessment techniques, that rely on decontextualised recall-of-knowledge activities, fail to be inclusive for two main reasons – first, they are not aligned with how children naturally demonstrate or use knowledge. Secondly, traditional assessment methods can maintain a deficit orientated image of learners which have the potential to lead to feelings of exclusion from the learning process which also impacts negatively on a child's personal self-image. This argument by Villa et al. (2005) is aligned with the research of scholars (Zakaria & Tahar, 2017) who explain that exclusionary assessment activities have a negative impact on learner self-concept with the net result that children become unmotivated to learn and participate.

Teachers need to examine how they assess learners' academic progress in unison with how they teach. This statement is supported by the research of scholars (Villa et al., 2005, p. 44) who suggest an alternative to traditional assessment methods used in the classroom. They call these alternatives 'authentic assessment approaches.' In authentic assessment learners are encouraged to perform, produce or demonstrate skills that represent real-life learning demands that occur in and out of the classroom without the standardised conditions that are pre-set or provided by an external examination body. An example of assessment in a 'written expression' or 'creative writing' assignment in a language class could have a learner keeping a portfolio of his/her work which would include several samples of their written expressions. These could be conceptual ideas, rough drafts for essays, self-edited versions of essays and final drafts. Throughout the portfolio experience the learner commits to self-assessment exercises, reflective and corrective exercises and the setting of personal goals for continued progress (Lewin & Shoemaker, 1998; Villa et al., 2005). Assessment of learners' work should not exist to rank or discriminate between learners' ability. Learning and assessment are not separate entities in the classroom, they function together.

For teachers to teach inclusively they need to place the learner at the centre of the assessment process. Loreman et al. (2010) explain that assessment needs to be formative, where it is used first, to understand student learning and secondly, for teachers to reflect on their own teaching. Loreman et al. (2010) further argue that teachers need to avoid summative assessment methods which are used to make judgements about learner achievements in comparison to others in the class of the same age. This form of assessment promotes bell curve thinking about learner achievement (Florian 2015). In order for formative assessment practices to be effective and authentic methods of assessment for inclusive teaching requires that teachers need to: first, believe that learners and teachers must learn together and secondly, review and reflect on the ongoing performance of the learners and systematically collect and analyse assessment evidence with purposeful aims (Loreman et al., 2010).

Graham, Tancredi, Willis and McGraw (2018) argue that problems arise with learner assessment when the external conditions (test paper construction for example) lead to the setting of criteria that make access to the questions more difficult for some individuals than others, which then disadvantages some learners in the process of taking the assessment. From their research project, Graham et al. (2018, p. 117) surmised that when the instructions on an assessment are "visually dense, procedurally difficult and linguistically challenging," learners who struggle with reading or concentration will be unfairly disadvantaged from demonstrating what they know about the topic. Graham et al. (2018) argue that ideas of the external conditions of the assessment are then fundamental to the concept of equity, where barriers are 'thrown up' that limit some children from demonstrating their full potential in the assessment process. In the assessment process inclusive teachers need to consider equity and access to the assessment materials, before they expect learners with a range of different learning needs to attempt them. Graham et al. (2018, p. 120) suggest from their research a set of considerations that teachers need to make during the creation of their learner assessments. First, visual accessibility of the materials which considers font-size and font-type for easy readability, ease of finding important information, visual cues to direct learners' attention to important aspects of the test and for teachers not to include material that is irrelevant to the actual task, as this becomes distracting. Secondly, consistency and clarity of instructions through procedural accessibility which considers how common access barriers are addressed in the format of the assessment task, learner feedback on the draft task is sought by the teacher, the assessment is scheduled to give all learners the best opportunity for success, enough space and access to resources is provided for responses on the paper, teachers collaborate with peers for feedback, to assist with

moderation and finally, the assessment tasks objectives and the indented achievement criteria are aligned. Thirdly, considerations of linguistic accessibility need to be considered, which include ensuring that question sentences are clear and short, the assessment instructions are clear and direct, specialist language is defined using learner-friendly language, information is used once only in the assessment and consistency of terminology is used throughout. Loreman et al. (2010) further explain how the way a question in an assessment is phrased or contextualised can make a difference to the extent to which learners are able to demonstrate to the teacher what they understand from the work taught in the lessons.

3.3.7 Teaching social skills

An important aspect of inclusive teaching considers the teacher focussing on the social skills that children learn in the classroom setting. The idea that the teaching of social skills is fundamental to teaching inclusively has a strong footprint in the literature (Florian & Rouse, 2005; Shoenfeld, 2012; Sapon-Shevin, 2007). The acquisition of social skills is necessary for learners, if they are to be able to communicate and interact with people in their environment in a positive way. Shoenfeld (2012) posits that if teachers embed a focus on social skills into their lessons, they ultimately enable learners, who would usually not be able to access the curriculum, due to social skills constraints, to thrive in the classroom setting. It has been shown by scholars (Malecki & Elliot, 2002) that results from their study provide evidence of a positive and significant relationship of ratings between social skills and academic achievement in reading and maths amongst third and fourth grade learners.

It has been revealed by scholars (Camargo et al., 2014) that certain specific intervention strategies are suited to inclusive teaching settings and have been shown to improve the social skills of learners. The overall specific goals of social skill development interventions are increased 'social interactions', learner initiation of play in groups or in pairs, increased duration of social interactions between peers and between learners and teachers and increased context-based conversations with peers (Camargo et al., 2014, p. 2111). Sapon-Shevin (2007) has suggested that the social skills that are important for a child to master include helping learners develop empathy by being considerate to others who are struggling with work, developing altruistic or unselfish intentions where learners reach decisions that are in everybody's best interest and learning to disagree respectfully. Camargo et al. (2014, p. 2106) argue that the practically applicable teaching interventions that were found to be effective included: first, the reading of a social story with prompted comprehension questions being asked. Secondly, visual

scripts used for prompting and modelling of information and communication. Thirdly, peers were taught by the teacher to use communication books to interact through modelling, prompting, repeated practice and providing corrective feedback. These findings showed that there are specific instructional practices that a teacher can use to increase the social skills of all the learners in the classroom.

3.3.8 Reflective teaching

Rouse (2017) argues that getting teachers to teach inclusively requires them to constantly re-evaluate how they teach and reconsider the attitudes and beliefs that inform their teaching. This requires teachers to constantly engage in a critically reflective process where they evaluate their inclusive practices. Walton (2018) surmises that thinking inclusively requires a teacher to be actively orientated towards a critique of inclusionary arrangements if they intend to achieve change in their classrooms. In other words, inclusive teachers are encouraged to adopt a critical way of thinking towards education processes and this sets them apart from non-inclusive teachers. Through their 'rethinking' of 'pedagogy' and their actions teachers who teach inclusively actively examine, question and deconstruct disabling classroom practices (Goodley, 2007, p. 320).

Much of what is done in the inclusive classroom is contextually bound to the circumstances and the unique range of different learner needs that the teacher must accommodate. Reflecting on how a lesson was taught and what instructional practices were deemed to be effective and what did not work allows the teacher to adjust for future lessons. Sapon-Shevin (2007) maintains that when teachers constantly question their own practice and when they ask themselves questions like 'how I can include more learners in the lesson,' they become more proficient at teaching inclusively. Through action-reflection-action processes teachers can make constant improvements and adjustments to their teaching, which ultimately makes them more effective inclusive educators. In another example Carrington and Selva (2010, p. 54) explain from a study that when pre-service teachers critically reflect on their teaching to learners with differences they "experienced this diversity from a more informed and authentic perspective."

For reflective teaching to be beneficial for inclusive instructional practice it is essential that a formal structure and actionable procedural process exists. Scholars (Loreman et al., 2010) argue that for a teacher to simply think about their actions is insufficient to elicit meaningful change that meets the challenge of teaching to a wide range of different learning needs. The

use of reflective practices for inclusive teaching require a deliberate process of identifying issues and working systematically and deliberately to solve them. Loreman (2017) recommends several tools to aid with reflective teaching practice to improve inclusive teaching as a deliberate process. These include the use of reflective diaries and journals to keep records on learners' growth; the use of indices or surveys to gauge how far he/she has progressed with his/her inclusive teaching ability - one being the Index for Inclusion; have colleagues review assessments, class instruction, class set-up and lesson plans and finally; observe colleagues teaching in order to critically reflect on their own practice. The concept of collaborating with colleagues in the school environment can benefit teachers inclusive instructional practices and their orientation towards inclusive teaching. It was reported in a study by scholars (Carrington and Saggers, 2008, p. 802) that collaboration between teachers and members of the wider school community is a critical component in the development of an "inclusive ethical framework."

Some researchers like Katz (2015), suggest that goal planning assists in teachers reflecting on their teaching. In goal planning teachers reflect on what has gone before in the lessons and plan future goals accordingly so that they are applicable for the next contact teaching session. This activity ensures that teachers constantly reflect on a lesson and evaluate how to improve access for all learners in the class in accordance with their range of learning needs. This reflection process then becomes the precursor to the goal setting for the next lesson. For improved reflection for inclusive teaching this process must be cyclical and needs to be repeated after every teaching experience. I surmise from a review of the literature (Bandura, 2001; Pantic & Florian, 2015; Katz, 2015) that cyclical repeats of goal planning generate a process or reflection-action-reflection which improves the teacher's ability to teach inclusively. Reflecting on teaching has a strong correlation to reflexivity and active collaboration between teachers and their fellow teachers. In this regard teachers take the initiative to engage in their own growth by creating reflective moments. This reflection can take on the form of individual reflection or where teachers collaborate with each other to bring about transformation and access for all. It is argued by scholars (Bandura, 2001; Pantic & Florian, 2015) that reflexivity is a distinctive process, where a person reflects on both their own teaching practices and collaborate with peers to bring about transformation. In the next section I consider the physical space of the school and the leadership who direct this as the third element essential for inclusive teaching.

3.4 Inclusive teaching and the environment: considerations of physical space and leadership

Literature that investigates the creation and maintenance of the essential background conditions to support classroom based inclusive instructional practice is worthy of exploration (Loreman, 2007). For teachers to engage in inclusive teaching and for schools to be inclusive learning places there must be a consideration of the schooling environment where the teaching takes place and how teachers interact within this space. The broad term 'environment' includes the physical environment of the school, the responsibility of the teaching staff to collaborate with guardians in learners' education, the school's values, culture and ethos in relation to its alignment towards inclusive teaching and the extent to which there is collaboration with professional, community-based and other support structures to ensure that teaching is made accessible for all learners. This aligns with Walton (2011, p. 244) who speaks of inclusive schools being "on the job" where schools develop sustainable inclusive practices, are welcoming of children with a range of different learning needs and are continuously looking at ways to include learners as challenges arise. This means that an inclusive school is constantly adapting to the needs of learners who enrol rather than excluding them on the basis that the school is not sufficiently resourced to cope with challenges presented by diversity.

Scholars have debated the challenges of developing inclusive schools which can execute inclusive teaching instructional practices (Engelbrecht, Green, Sigamoney, Naicker, Levi & Engelbrecht, 1999; Engelbrecht, Oswald, Swart, Kitching & Eloff, 2005; Gous & Eloff, 2014). Prominent topics of conversation from the literature include first, considering how the teaching environment of a school can be a barrier to inclusion if the ethos and culture does not support inclusive principles. Secondly, how the physical environment and physical structure of the school, which includes the land and architecture, affords or constrains learners with disabilities from accessing learning. This includes issues related to accessibility to all parts of the school, including physical spaces. Thirdly, the attitude and orientation of the school's leadership towards inclusive education and its constraining or affording influence on inclusive teaching. this is exemplified in the example presented by scholars (Carrington & Robinson 2006, p. 325) who explain a situation where a principal mentioned that he was supportive of the views of inclusive education, only to focus on high academic achievement and standards as the primary objective for each grade in his school. This resulted in effort being invested in developing programmes to support children who could not maintain the high standards expected in separate settings away from the "normal teaching program for the grade." Carrington and Robinson

(2006, p. 325) argue that "by ignoring responsibility to provide active and successful learning experiences for the learners in each class, staff at the school continued to reinforce the deficit perception of learners who were not responding 'appropriately' to the set curricula." Finally, issues of community were considered an important aspect of building and maintaining an inclusive school. Here the conversation included the role that parents could provide in assisting teachers, where additional support was required. Conversely, it is argued by scholars (Engelbrecht et al., 1999; Engelbrecht et al., 2005) that the failure to establish collaborative and trusting relationships between teachers, parents and school administrators was one of the greatest challenges facing inclusive teaching. It became evident from the literature (Gous et al., 2014; Engelbrecht et al., 2005; Walton, 2011) that teaching inclusively was more than just what a teacher does to include learners in the classroom in terms of teaching strategies. The researchers argue that it was also important to consider the influence of the unique context of the school and all components within and around the school where teachers find themselves teaching.

3.4.1 School leadership

Scholars (Gous et al., 2014; Engelbrecht et al., 2005; Walton, 2011) describe how school leadership is a critical factor which determines the extent to which inclusive education gains traction and that the attitude of the principal as vision builder is important. This determining factor, critical for inclusive teaching, involves the commitment of the principal, deputy principals and heads of departments to the vision of inclusive teaching to reach all levels of the school structure. In schools where this was found to have been successful there was evidence of the schools' management structures mobilising human, financial and community resources to promote the ideas of inclusion (Walton, 2011). Some of the efforts of school management identified by scholars (Walton, 2011) included a focus on the physical environment for learners with physical disabilities to enable them full access to all facilities on the school premises; admitting learners with disabilities, orphans and learners with HIV/AIDS; creating feeding schemes for those learners coming to school from disadvantaged communities. Walton (2011) identified that central to these efforts was the leadership team's ability to be proactive in decision making, rather than waiting for the relevant education department or relevant others to implement directives or policy.

A central component required for inclusive teaching to become a focal point within the school environment is the leadership provided by the school principal. The attitude and sensitivity of

the school principal towards the ideas of inclusive education are critical for systemic change and transformation from a non-inclusive school to an inclusive one. The school principal needs to understand what inclusive education is and how it can be made a reality within the school space where he/she is directly responsible for driving internal policy development and articulation, as well as the processes of school administration. Murtadha-Watts and Stoughton (2004) argue that the personal values held by school principals are closely connected to their leadership roles. Furthermore, Murtadha-Watts and Stoughton (2004) surmise that the relative commitment of the school principal to removing deep-rooted biases about learner differences that exist within a school community will contribute to school-wide environmental responsiveness to diversity and different learning needs of the children. Finally, when school leaders provide teachers with autonomy to make their own judgement calls and the relative freedom and trust to collaborate with peers to meet the challenges of teaching children with a range of different learning needs, they are more empowered to teach inclusively. This aligns with Loreman (2007, p. 26) who argues that the principal plays a critical role in fostering respect for individual differences and by empowering the teaching staff by providing them with some level of operational "autonomy and recognising their achievements."

Also considered was the management structures at a macro and a micro level and the negative or positive impact that they have on inclusive teaching (Engelbrecht, 2006; Engelbrecht et al., 2005; Davidoff & Lazarus, 1997). These authors identified the various reporting structures and levels of accountability from the Directorate of Education at a government or macro level, through regional and school leadership structures at a meso level, to the teacher practicing in the classroom at the micro level. Engelbrecht et al. (1999) surmised that there was a responsibility of each role-player in each system at each level to make contributions to the functioning of an inclusive school. Scholars (Davidoff & Lazarus, 1997; Engelbrecht et al., 1999) argue that promoting inclusive teaching in a school system was not possible if all members in the system did not take accountability for inclusion. These responsibilities included formulation of school policy, human resource utilisation, allocation of technical and support services, school culture, curriculum application and development and leadership and management competencies (Davidoff & Lazarus, 1997; Engelbrecht et al., 1999).

Also prominent in the literature (Loreman, 2007) was the idea that school leaders play a role in the schooling and classroom structuring. In practice, this means considering the time duration of a lesson that it is not too long when managing timetabling, ensuring that learners are not streamed in their grades, rather that they are grouped in a heterogeneous manner and

finally, a sharing of resources is encouraged between classrooms where teachers share physical aids or technological support devices.

3.4.2 Teacher and parent collaboration for educational access and success

Schools that strive to have their teachers teaching inclusively must place an emphasis on the involvement of the wider community in teaching and learning. This is supported in the literature. For example, Walton (2011, p. 244) explains how schools where teachers can teach inclusively are characterised by "their outreach and service to their communities beyond their obligations to the learners in their classrooms." It was also suggested by scholars (Engelbrecht, Nel, Smit & van Deventer, 2016) that where teachers were unable to gain resources for their classroom to aid in creating an inclusive environment, they should share and exchange resources with neighbouring school in the community. Researchers also focussed on investigating the sharing of information between teachers and the community as a necessary response to counter this concern around the success or lack thereof of inclusive teaching in schools (Hall & Engelbrecht, 1999). The role of parents and the wider community for inclusive schooling was deemed to be of such significance that it was included into national policy and state legislation in White Paper 6 (2001). In the next section I consider the physical environment where teaching and learning take place, and essentially, where the human components in the classroom space interact.

3.4.3 The physical space

A key component for inclusive teaching is teachers modify or adapt the teaching space and infrastructure in their classrooms and how they integrate and utilise various physical resources (Loreman et al., 2010; Loreman, 2007). Scholars (Walton, Nel, Hugo & Muller, 2006) refer to how teachers utilise assistive devices, multimedia, computers, video clips, microphones and braille translators to help all learners enjoy maximum success. Walton et al. (2009) also conclude that schools that intend to be inclusive must also consider the physical space and how to utilise it and make the school and classrooms accessible for wheelchairs. Finally, Loreman (2007, p. 28) comments on the quality of the lighting in the classroom and the use of "technological aids are fundamental if children are even to get inside the classroom door."

In many instances the external physical space is beyond the direct control of the teacher. However, Loreman et al. (2010) argue that it is within the classroom that an individual teacher has the ability to make a significant and positive impact on physical access for learners. Loreman et al., (2010) explain that first, the teachers can ensure that all children can move

around freely by removing miscellaneous clutter. Secondly, walkways should be made wide and clear of hazards, and doors should be fully opened to allow access for partially sighted children. Thirdly, learners who are easily distracted can be seated in areas of the class where distractions are at a minimum. Fourthly, the height of tables and chairs can be considered for access for wheelchairs and children with posture issues. Fifthly, issues of lighting should be considered for learners with visual problems or those with light sensitivities. Finally, the general seating plan can be modified for group-work activities and for seating to be orientated for maximum learner focus for direct instruction sessions (Loreman et al., 2010).

3.5 Conclusion

In this chapter I have discussed what I perceive teaching inclusively to be as informed by the extant literature. In this chapter, I have argued that teaching inclusively requires a focus on three critical organising principles that all need to be given attention by a teacher who intends to teach inclusively. First, I have considered the conceptual orientation of the teacher whose practices and actions are informed by what it means to be an inclusive teacher in relation to the ideas of social justice and equality. Secondly, I examined and unpacked a variety of instructional practices suggested in the literature that a teacher would need to apply to his/her teaching in order to meet the criteria of what it means to teach inclusively. Finally, I examined the influence and attention that teachers need to place on the physical spaces in which they teach, as well the surround environment of the school. These three dimensions or organising principles need to be simultaneously applied by a teacher to be considered a teacher who teaches inclusively. In the next two chapters I describe what Cultural Historical Activity Theory (CHAT) and activity systems are, why I have chosen CHAT and its basic principles as a theoretical framework to assist me in interpreting my findings and finally, how CHAT and activity systems analysis are relevant to studies into education, specifically inclusive education. This is done through an analysis of the relevant theory and research around CHAT and its applications.

CHAPTER 4

LITERATURE REVIEW: THEORETICAL FRAMEWORK: CULTURAL HISTORICAL ACTIVITY THEORY

4.1 INTRODUCTION

Cultural Historical Activity Theory (CHAT) was selected as the theoretical framework or lens to interpret the research data for this thesis. CHAT as described by scholars (Engeström, 2000a; Roth, 2004; Ellis, 2011) is a powerful theoretical framework that allows researchers to consider the relationships between a multiplicity of components that can all simultaneously have an influence on the area or object of study. Using CHAT as a theoretical lens allows me to understand how the complexities, and often conflicting motives, of a multitude of components within an activity system impact on the object of study.

Hoffman-Kipp, Artiles and López-Torres (2003) explain that CHAT acts as a multifocal analytical lens that can simultaneously focus on parts, elements and moments of practice as defined from theories while still attending to the context in which these moments occur. The real strength evident from the use of CHAT is its capacity to simultaneously unpack and illuminate relationships between parts and the constituent whole system. Therefore, scholars (Roth & Lee, 2007) endorse the use of CHAT and activity systems frameworks for studies that investigate teaching and learning in schools, as they allow a researcher to map out complex instructional activity within a single integrated system.

CHAT is a theoretical framework that allows me to confront the emergent research data from a distinct point of view. In its most basic form CHAT allows for the researcher to analyse and interpret data that came from recorded human behaviour. This recorded human behaviour, in the case of this study, constitutes the teacher in the classroom and the extent to which he/she is constrained or afforded in his/her ability to teach inclusively. I argue first, that this cannot be considered in isolation, but rather as acting within a collective activity system which is then taken as the whole unit of analysis. This collective activity system would be the school in which the teacher conducts daily activities. Secondly, this collective activity system, delineated as the school and its constituent units of analysis of components, of which the teacher is one, can then be understood not only within its social and situational context but also within its historical context. Finally, and of importance for this study, are the contradictions or tensions between

and within components of the activity system. These inner contradictions can then be analysed as the source of disruption, innovation, change and development of the system in its entirety as well as the individual teachers (Engeström, 1993; 1999). Also, through the application of CHAT and by examining the data within the context of Engeström's (2000b; 2001) second and third generation activity system models I needed to allow for consideration of the simultaneous interaction of multiple components and their interconnectedness as they transform one another in the creative process of human activity.

Other theoretical frameworks were considered for the purposes of analysing and interpreting the data obtained from my study. These included, the concepts and ideas offered by complexity theory (Opfer & Pedder, 2011) and Bronfenbrenner's (1979) bio-ecological systems theory. In the literature, there are many examples where complexity theory and bio-ecological systems theory are used extensively in educational research (Swart & Pettipher, 2016; Opfer & Pedder, 2011). However, my decision for selecting CHAT, as opposed to complexity theory or bio-ecological systems theory, was that CHAT offered me the 'practical activity systems models' (triangles) through which I could analyse my data. As Engeström (2009, p. 24) explains, an activity system model "is a conceptual tool to be used by researchers, interventionists and practitioners in the analysis and design of activities." Activity systems models have also been identified, and proven, as effective research tools for the analysis of concrete data that considers the historical context of the circumstances under investigation. Engeström (2009, p. 24) describes how "in concrete studies, the model itself needs to be tested and filled with historically specific contents." This aligns with my study, which is concerned with concrete data, in order to identify the tensions and contradictions within and between the components in a system and the historicity of each complex activity system (school). Furthermore, Engeström's (2000) activity system models provide me with the framework to examine the interactions between the various components within the system, that compromises the shared actions and activity in the schools, and the relationship between systems in society with shared interests. This was done in relation to the research questions.

My study does not stand alone in an African context as a research project that uses a systems perspectives theoretical framework to analyse data. There exists a rich body of scholarly work that emphasises an interpretation of bio-ecological and systems perspectives that originated in other African countries. A proliferation of research publications has indicated that bio-ecological and systems perspectives have proved to be effective in education research. For

example, Pillay (2018, p. 1-2) pointed out that by adopting a bio-ecological systems model the author were able to show how "inclusion and development of orphans and vulnerable children are crucial for social justice and good governance in Africa." Another example, by the scholars Mabhoyi and Seroto (2019), adopted Bronfenbrenner's bio-ecological perspective to investigate the impact of socio-economic conditions on at-risk students in selected schools in Zimbabwe.

I argue that to conduct a qualitative study within a complex system without the lens or framework of CHAT the findings would be isolated and fail to recognise the powerful influences that other components within a complex activity system have on the *object* under investigation. In this chapter I first provide a brief outline of the development of CHAT and then proceed to discuss the modern interpretations of generational models of activity systems described by Engeström (2000a). Secondly, I describe the five basic principles of CHAT and explain how they are relevant to the investigation of teachers as the *subject* component, and the constraints and affordances to their inclusive teaching resulting from interaction with intrinsic factors to them and extrinsic factors in the environment in which they work. Finally, I describe theoretical tools or concepts that are central to CHAT theory that assisted me in obtaining a detailed and more nuanced understanding of the findings that emerged from the study.

4.2 The evolution of Activity Systems Theory into contemporary models/frameworks for practical application

As mentioned above, in this study the researcher employs the Activity Systems Framework models as described by Engeström (2000a; 2001). These models serve as a visual lens through which to interpret my findings. Activity Systems Frameworks are useful in that they allow for the examination of categories and themes that emerged from the inductive data analysis phase in accordance with the determining structures or each activity systems model. Engeström (2009, p. 24) explains that an "activity system is built around its object." The structure of activity systems models provided the interconnected framework to gain insight into the relationships within and between various components under complex and dynamic circumstances. In this section I describe Engeström's (2000b; 2000a; 2001) activity systems models and explain how they are relevant and used in the study. However, it is necessary to first describe the historical roots of CHAT that preceded the contemporary models.

4.2.1 First generation activity systems

The development and origins of CHAT can be traced back to seminal writings nearly a hundred years ago. CHAT was first invented and pioneered by Lev Vygotsky (1978) in the late 1920s and early 1930s. CHAT has since evolved through three generations. The first generation focussed on Vygotsky's ideas around *mediation* and was crystallised in Vygotsky's (1978) famous triangular model which made a direct connection between a *stimulus* and a *response* which in turn was transcended by a *complex mediated event* acting on the stimulus and the *response* (Engeström, 2001; 1987). As with all evolving constructs, there were limitations which subsequent revisions or models tried to address. This resulted in the first-generation model being revised by Leont'ev, (Leont'ev, 1981; also known as Leontiev, Leontyev). The main reason for the revision of the early model centred on the fact that the first-generation model was 'individually focussed' and did not consider the crucial difference between the individual action and the collective activity of people working together as part of a community. This concept of *activity* took the conceptual idea forward as it considered the complex interactions between the individual subject and his/her community in which he/she lives. Leont'ev never graphically expanded Vygotsky's original model into a 'collective activity system.' This was subsequently done by Engeström (1987). Figure 1 shows Vygostsky's (1978) first generation triangle model. It illustrates the mediated relationship between mediating artefacts, the subject component and the object component.

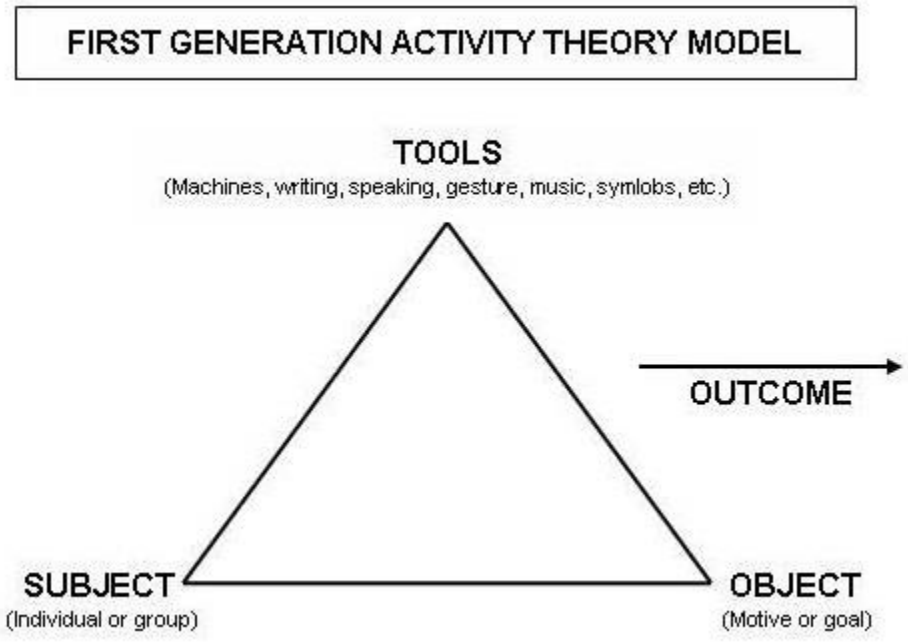


Figure 1. First generation Activity Theory Model (Engeström, 1987)

4.2.2 Second generation activity systems

Daniels (2004a, p. 123) commented, that "In order to progress the development of activity theory Engeström expanded the original triangular representation of activity systems" from the first generation model into a second generation model to represent the "social/collective" elements in an activity system. Engeström's (2001, p. 134) second generation activity theory model considered the concept of activity where it "took the paradigm a huge step forward in that it turned the focus on complex interrelations between the individual subject and his or her community." Scholars (Stetsenko & Arievitch, 2004; Engeström, 1987; 2000a; 2001) describe the human activity-system graphic as a triangle with interconnecting, multi-directional arrows representing the dynamic relationships between *tools* and *signs*, the *subject*, the *object*, the *rules*, the *community, division of labour* and *mediating artefacts*. These multi-dimensional relationships play out to generate a sense of meaning and finally an outcome. The uppermost sub-triangle represents the individual and group actions, embedded in a collective activity system and constitutes the first-generation activity system. The *object* is often depicted in diagrams in bold or in colour indicating that object-orientated actions are in all cases explicitly and implicitly characterised by sense-making, ambiguity interpretation and the potential for change. Also, and importantly, the *object* is the focal point of the system's existence (Engeström, 2000a). Figure 2 illustrates the interactions of these various components that exist in a complex system.

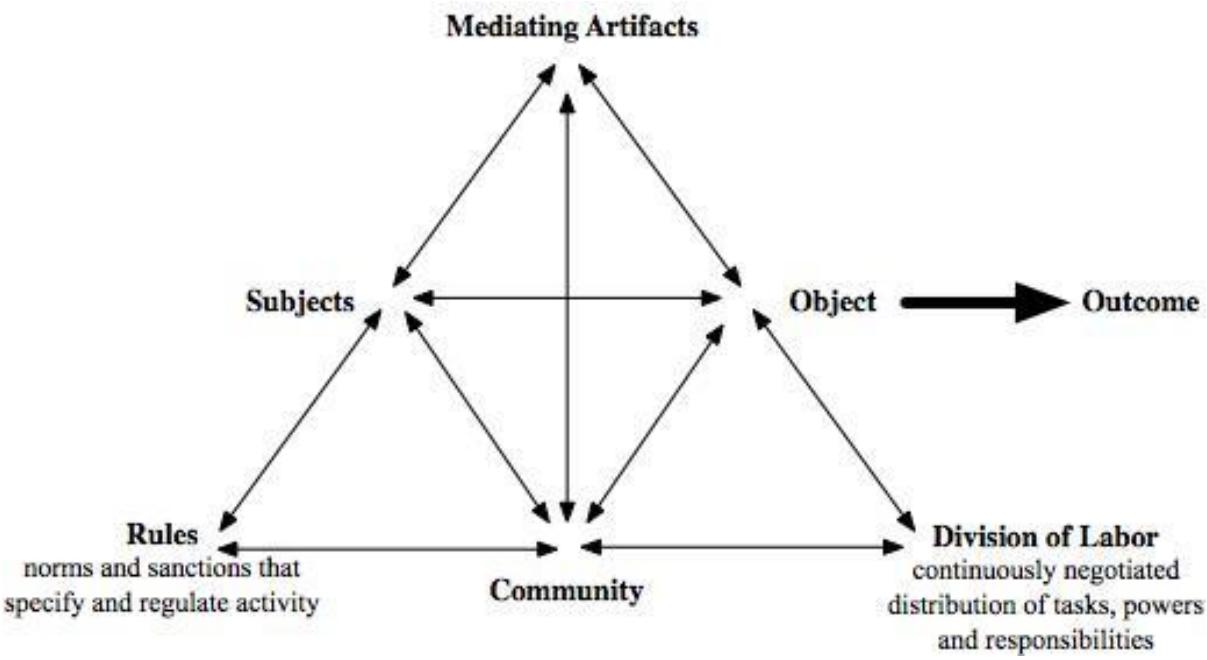


Figure 2. Second generation: Activity System Triangle (Anderson & Stillman, 2013)

Much research has been done internationally where activity systems have been used as a theoretical framework or lens to examine the relationships, transformations and tensions in a complex social system. Examples include research into private and public health care facilities (Engeström, 2000a), large government institutions and more recently, schools. If one considers the school as an activity system then, according to scholars (Engeström, 2001; Roth & Lee 2007), second generation model of an activity system, teachers exist, or can be represented, as the *subjects* in the triangle. Their *activity* (teaching practice) then becomes a focal point of analysis for research. The learners in the school represent the *object* dimension in the model. The principles of control that exist in the social system are the *rules* that govern the social interaction within the system, these rules are both created within the system and are imposed on the system from other systems in the broader society that also have a vested interest in the *object* (learners) in the school. The prescribed roles and professional obligations assigned to the teachers that direct their practice and function, and the management structures that exist in the school belong to the *division of labour* category on the triangle. The *community* component comprises the many individuals and sub-groups that share the same general interest in the *object* and includes the other teachers in the school and associated stakeholders. The *mediating artefacts* component represents all the instruments at the teacher's (subject) disposal. These include teacher professional knowledge, instructional practice methods, and physical tools that include text-books and teaching aids (Oswald, 2010).

4.2.3 Third generation activity systems

The second-generation activity system considers how the dynamic mediated learning that takes place between the *subject* and the *object* is embedded within a broader social system that comprises the rest of the activity system such as a hospital or a school for instance (Engeström, 2009). Standing on its own, the first-generation activity system was deemed to be too "individually focussed" and insufficient when considering the influence of other components on the collective activity of the system (Engeström, 2001, p. 134). The first- and second-generation activity systems models only consider activity within the system. However, a system does not exist in isolation from the rest of society and human existence. Engeström (2009, p. 23) explains that "fibers or threads of action" become intertwined to form a durable rope of "connected activity." A system - a school for example - can be considered to be a thread or fiber in the bigger fabric of society and as such, there are many other complex systems in society that share a relationship with or a component of the activity system under investigation. To account for the influence of other influencing systems that exist in society on the system

under observation/research, Engeström's (1999; 2001) Third Generation of Activity Theory as an interactive model between systems came into existence. Engeström (2001, p. 136)" describes how "the basic model is expanded to include minimally two interacting activity systems" where an object is potentially shared or "jointly constructed." Engeström (1999) explains how this interactive model would address multiple perspectives and develop conceptual tools to understand dialogue which would essentially consist of networks of interacting activity systems. Within the framework of education this could be represented by examining the outcome of the *activity* of the *subject* on the *object* from one activity system triangle together with the influences on the same *object* from other triangles or influencing activity systems. Also, worth consideration is that there can be influences from a wider array of complex interlinking systems that have an impact on the eventual outcomes of the particular shared *object* between two related systems. Considering this broader dimension, researchers can examine contradictions/tensions in a separate activity system and conceptualise how these can have an impact on the outcomes envisioned from the activity system that is the focus of the study.

In summary, the second-generation activity system model on its own was insufficient to provide a mechanism to address the fact that no individual system in society functions in isolation from other systems. Engeström (2000a; 2001) addressed this by developing a series of interconnecting activity systems which share a common object, all influencing the common object from a different perspective. He called this the 'third generation activity theory.' This third-generation model of activity theory is intended to provide mechanisms and conceptual tools to understand the dialogues, multiple perspectives and networks between interconnecting activity systems. Figure 3 demonstrates the relationships between interrelated systems in society.

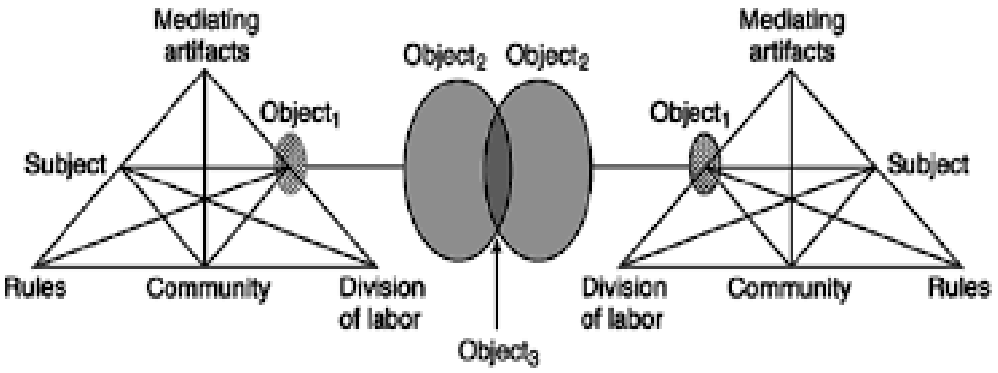


Figure 3. Engeström's (2001) Third Generation Activity System model

Oswald (2010) underlines how the notion of *activity* acting on the *object* is central to activity systems. Van Vlaenderen (2001, as cited in Oswald, 2010) postulates that *activity* is structured by, and socially embedded in the social-cultural-historical context of teachers' actions occurring in the context of the activities of other people with whom they share their lives. This also constitutes their professional and social interactions as teachers in the schools in which they work. The *activity* dimension needs to be studied as a whole; one cannot only study individuals or components separately as this would not allow for the dialectics that exist in the system. Russell (1997, p. 11) argues that activity systems are "dialectically structured." Scholars (Roth & Lee 2007, p. 197) suggests that by only considering one aspect of the *activity* dimension we would fail to recognise the "mutual presupposition of opposites." In other words, the *activity* provides the dialectical 'crossing point' between the person (teacher) and the situational context (school and social structures). Engeström (1999b) further crystallises this concept when he describes joint *activity* as the unit of analysis for activity theory, not individual *activity*. In his works he is interested in the processes involved in social transformation and considers the analysis of the social world to be paramount where the conflicting nature of social practice is considered (Daniels, 2004b). Engeström (1999b) recognises that the motive or force for any change or development in a society exists because of the tensions or contradictions that create instability within the system. In this process, where tensions act on *subjects* affecting an *object* through mediated *activity*, both the participants and the environment are affected and changed as a result (Daniels, 2004b).

4.3 The five basic principles of CHAT

A range of scholars (Engeström, 2001; Roth 2004; Ellis, 2011) describe how CHAT is framed by five basic principles. First, it is an artefact mediated *object*-orientated collective activity. Secondly, CHAT is a multi-voiced theory. Thirdly, it is a historically influenced theory. Fourthly, it recognises the concept of contradiction as a result of tension between and within components of an activity system and between activity systems as central to the theory. Finally, through contradictions there exists the possibility of transformation of the object of activity as the actors in the system (subject and community) journey through the zone of proximal development. Here I expand on these five fundamental basic principles of CHAT and how they are relevant for interpreting the findings of this thesis.

The first basic principle of CHAT states that an activity system is a "collective and artefact mediated, object orientated activity system" taken as the primary unit of analyses (Engeström, 2001, p. 136). Engeström (2001; 2000a) explains how a central tenant of this basic principle is that individual, or even group *actions* are independent or subordinate units of analysis when interpreted against the background of entire activity systems. The second basic principle refers to the multi-voicedness of activity systems, where the activity system is always seen as a community of actors who all have "multiple points of view," traditions and human interests and is a source of contradiction, trouble and ultimately innovation (Engeström, 2001, p. 136). For example, the *division of labour* component would designate positions through directives for *subjects* to follow who, in turn, as unique individuals, bring their own diverse histories and dispositions into an activity system. The activity system itself carries its own strands of history engraved in its artefacts and rules which adds a 'voice' to the interactions within the system. These various and sometimes conflicting 'voices' arising from diverse motives, cause tensions within the system. Engeström (2001, p. 136) explains how the third basic principle of CHAT, that of 'historicity' alludes to how activity systems evolve, take shape and are "transformed over lengthy periods of time." Therefore, from a historicity perspective, the visible problems seen to exist within the system and the system's future potential can only be understood against the context of its own history. The fourth basic principle of CHAT is that of contradictions. According to scholars (Engeström, 2001; Roth 2004; Roth & Lee 2007) these contradictions are historically accumulating tensions within and between activity systems and are a source of change, transformation and development. Finally, the fifth basic principle of CHAT speaks to the "possibility of expansive transformation in activity systems" (Engeström, 2001, p. 137). As the contradictions of an activity system are aggravated, participants begin to question established norms, which can lead to escalation where collaborative envisioning can lead to change (Engeström, 2001). The idea of expansive transformation in CHAT is where the *object-motive* and the *activity* are re-conceptualised to embrace a wider range of possibilities than in the previous mode of *activity* (Engeström, 2000b; 2001). In the discussion that follows I discuss how the five basic principles relate to the interpretation of the findings of this study with regards to CHAT as the theoretical framework. It is worth considering that it can be difficult to isolate each basic principle and discuss them independently, as they are interwoven and have a reciprocal effect on each other. Therefore, I refer to multiple basic principles of CHAT in each focal point of discussion.

4.3.1 Multi-voicedness and Historicity: the second and third basic principles of CHAT

As I coded my data for evidence and categories, themes emerged regarding what was constraining or affording teachers to teach inclusively. I considered the historical context, and as a result uncovered the concealments that have resulted in the hegemonic nature that exists in an activity system. It has been explained how the very existence of an activity system is as a result of groups of people coming together around a shared *object* that is the result of an innate need. To develop a deeper understanding of the dynamics and the contradictions that emerge as a system evolves in complexity, and then how the transformed object presently exists within an activity system, one needs to consider that no system exists in a vacuum, or as an instant manifestation divorced of its past (Engeström 2000a; 2001 & Ellis 2011). Attention needs to be drawn simultaneously to the historicity and multi-voicedness of activity systems.

Regarding the principle of multi-voicedness as the second basic principle of CHAT, it is often presumed that a group of people who come together and share in the activity of achieving a common *object* are a homogenous entity that unproblematically adopts best practice. However, this presumption is not accurate. The so-called best practice or effective activity associated with achieving the targets for a common object instead responds and appropriates from a multiplicity of different viewpoints, dispositions, elements and voices (Ellis, 2011). Ellis (2011) argues that this multiplicity needs to be understood in terms of a multitude of historical layers. Engeström (2000a; 2000b; 2001) describes the multitude of historical layers existing within a system with his "powerful genetic metaphor" of the 'historical sediments and the emerging buds or shoots' of an activity system (Ellis, 2011. P. 24). Laclau (1990) explains that to understand a social system historically, it is important to refer to its contingent conditions of emergence. It can be proposed that identifying how the origins of apparently objective social situations became concealed from view is essential in understanding how hegemonic understandings play out in practice (Laclau, 1990).

4.3.2 The concept of 'object' orientation as the first basic principle of CHAT

CHAT is often described as being a cross disciplinary framework where individual and social practices are interlinked (Kuutti, 1996). One of the most difficult concepts to understand in CHAT is that of the *object*. The *object* is the basic reason for the existence of any activity system. Essentially all the other components of an activity system including the *subjects, mediating tools, community, rules* and the *divisions of labour* all coalesce around the shared *object* (Kuutti, 1996). Therefore, the *object* is the primary focus of the activity system and can

be the 'problem' that needs solving or addressing (Jones, Edwards, Tuim Viotto Filho, 2014). Engeström (2001) explains how *activities* that happen within a system are collective and motivated by the desire to transform the *object* into an expected *outcome*. It is therefore the *object* that creates the meaning for the activity.

Engeström (1983) describes the *object* as the 'raw material' or the 'problem space' at which *subjects* direct *activity* within a system. The *object* is then moulded or transformed into outcomes with the assistance of either physical or symbolic *tools/mediating instruments* (Engeström, 1993). Essentially an *object* can be thought of or conceptualised as the basic *motive* behind collective human activity. Scholars (Engeström & Escalante, 1996) explain that an *object* is embedded in shared activity and is distinct from the more common association of an *object* as a material entity. Also, an *object* is understood differently by different *subjects* within an activity system as each *subject* will have their own perspectives on how they define or position the said *object*. This results in the *shared activity* of a system being multi-voiced. The very notion of the construction of an *object* shared by different *subjects* is then an essential characteristic of innovation and novelty which results in transformation and growth within a complex system (Keresou, Kijamaa & Engeström, 2010).

As a result of the multiple voices within an activity system (second basic principle of CHAT) there will exist the possibility for tensions and contradictions which can then become a source of innovation. These internal contradictions that result from different interpretations or understandings of the shared *object* of activity result in the activity system rarely being stable, but rather in a constant state of dynamic flux. These contradictions act as driving forces of change and ultimately transformation, as they create tensions which result in innovative attempts for development in social action (Engeström, 1987). The final aspect that needs to be considered is how the *object* is influenced by the historical background that frames the activity system. As already mentioned, all activity systems, as social entities or constructs in a larger social fabric made up of "intertwined" threads, do not exist in isolation but rather within the backdrop of their own historical contexts (Engeström, 2009, p. 23). These historical contexts in turn have a profound impact on the *object* and the subsequent meaningful *activity* that it directs.

The object of activity

Kaptelinin (2005) argues that when researchers are challenged with the complexity of the multi-voiced nature of an activity system, combined with the multitude of contradictions

between and within various components, the idea of invoking the conceptual lens of the *object of activity* can assist in making sense of what might be constraining the projected or intended outcomes from materialising. Considering findings through the lens of the *object of activity* allows a researcher to examine the collective or individual *motives* around an identified need which preceded the existence of the *object of activity* within an activity system (Kaptelenin, 2005; Engeström, 1999b).

As the most fundamental and basic concept associated with activity theory, the *object of activity* can be understood as the ultimate reason behind behaviour of individuals, groups or organisations (Leont'ev, 1978; Engeström, 1999). The *object of activity* is often described as the 'sense maker' which gives meaning to, and defines, the values of entities or phenomena (Kaptelenin, 2005). Similarly, the *object of activity* is defined as the 'raw material' or the 'problem space' at which the activity within the system is directed and which is transformed into outcomes (Engeström & Launis, 2003). As I advance with the data analysis, the *object of activity* within a system identifies itself and its subsequent development over time. This serves as a basis for obtaining a deeper and more nuanced or structured understanding of what are often fragmented or seemingly unrelated findings. To make sense of this argument Kaptelenin (2005) suggests that some of the problems related to the notion of the *object of activity* may result from the contradictions within the activity system itself.

Taking this into account, Kaptelinin (2005) argues that to better understand the *object of activity* and how subjects engage in communal activity, a researcher needs to investigate the historical or original 'motives' and the original 'needs' around the object and the reason for the existence of the activity system in the first place. Leont'ev (1978) points out that the 'motive' emerges as a result of a need meeting its *object*. He emphasises that it is impossible for an *object* to exist without a 'motive', be it a collective or an individual 'motive.' According to Leont'ev (1978), there are two types of 'motive' that exist to satisfy a need and create activity towards an object. These being: 'sense-forming motives', which give the activity meaning, and 'motive stimuli.' For example, the knowledge from pre-service teacher education internalised within an educator entering the profession can form the 'sense-forming motive' around an *object*. Of secondary importance to 'sense-forming motives', according to Leont'ev (1978), is the 'motive stimuli' which is basically the emotional responses a person has when coming into conflict with the meaning of activity.

Kaptelinin (2005) explains how within an activity system one or more 'motives' directed towards an *object* affect the *activity*. He explains further how even if these 'motives' are powerful the *activity* does not really begin until the *object of activity* is clearly defined. Consequently, the *object* is cooperatively defined by the whole set of 'motives' that the whole set of *subjects* strive to achieve through their *activity*. Consider a school system as an example, the *activity* constitutes all actions, including the teaching by all members of the community, and all other actions that are directed at the *objec*t (historically motivated teaching approach to teaching the learners) to achieve the outcome of having children learn. Until the object is clearly defined, activity cannot begin and the outcome remains unachieved.

4.3.3 Activity theory as a dialectical theory: the fourth basic CHAT principle of contradiction

Activity theory is also described as a dialectical theory where the dialectical concept of *contradiction* plays an important role. Importantly, the contradictions that emerge within an activity system constitute the future driving force for transformation. In Engeström's (2014; 2000a) second generation model of an activity system, depicting the interconnected relationships between the *object, subject, tools,* and the *community*, *rules*, and *division of labour*, these contradictions or tensions are represented within the model as *two-headed lightning bolts*. For myself, the dialectical concept of contradiction has profound significance. This is particularly true where I intend to add a transformative dimension to the study and I am looking for evidence of transformation in the *object* or seeking to identify what interactions between components in a system are constraining or affording transformation.

The central reason that makes an activity system framework model a powerful tool for use in the analysis of research findings is its ability to accommodate dialectics (Stetsenko, 2013; Roth & Lee 2007). Dialectics aspire to be universals, because they assert the "mutual presupposition of opposites" (Roth & Lee 2007, p. 197). According to Roth and Lee (2007, p. 195) Dialectical approaches to understanding activity in a system allows for units of analysis to be considered by researchers "in terms of mutually exclusive category pairs, including individual-collective, body-mind, subject-object, agency-structure, and material- ideal; that is, the opposites are theorized as non-identical expressions of the same category, which thereby comes to embody an inner contradiction. To clarify this description with an example, I draw attention to social categories which have built-in contradictions such as the issue of autonomy of choice/determined structure, and the example of the individual/collective. In the case of the

latter example the individual and the collective presuppose each other and essentially neither can be used as a theoretical starting point for explaining the other. Roth (2004) points out that the latter (collective) which would be society, presently dominates the educational literature.

Engeström (2014) identifies contradictions mainly as the dysfunctions between the six dimensions of the CHAT model. For example, consider the tension between the *subject* component and the *rules* component in an activity system, both with a different motive to achieve the object of activity. This tension creates a contradiction that ultimately can lead to the formation of a transformed object. Contradictions can also be described as dilemmas, disturbances or dis-coordination's. Roth (2004) identifies different types of contradictions that can exist in the CHAT triangle: primary contradictions that exist within each constituent component of an activity system; secondary contradictions that are found between these constituents (e.g. object and subject) and tertiary contradictions that juxtapose the object of the dominant form of activity with the object of a culturally more advanced activity.

This utilisation of dialectics as the "mutual presupposition of opposites" (Roth & Lee 2007, p. 197) ensures that through the framework of CHAT, complex activity systems can never be considered as static entities and need rather to be recognised as inherently dynamic in nature. Therefore, this inherently dialectical model embodies change as a result of the conflict caused by the contradictions that exist when CHAT is applied to a case study in the research sphere. Cole (2004) postulates that because CHAT addresses the troubling dialectic contradictions, or divides between individual and collective, material and mental, biography and history, and praxis and theory, this analytic theory is deserving of wider currency in the educational community.

Contradictions in systems as a theoretical tool for data analysis

The fourth basic principle of contradictions and their dialectic nature are central to my study and therefore a deeper understanding of what they essentially are and how they have a powerful and definitively transformative effect on activity systems needs to be explained. In this section I develop Engeström's (1999; 2014) four levels of contradictions that he sees as existing in activity systems. Contradictions are described by the Foot (2014) as the catalysts for change and development in a system and are often referred to in a positive light as 'growth buds' of emergence rather than as points of failure. Also, contradictions are referred to as indicating a 'misfit' within and between different elements of an activity system. Furthermore, contradictions have been described as revealing the growing edges of an activity system, where

contradictions lead to an outward expanding spiral of expansive learning cycles, where participants reflect, analyse and implement new practices (Foot, 2014). I argue that through the process of identifying and discussing the contradictions between and within components in a complex system it is possible to provide a more nuanced account of which factors constrain and afford teachers from being able to teach inclusively within the contextual realities of the school systems in which they teach.

Using Engeström's (2014) concept of contradictions in relation to the fourth basic principle of CHAT requires a more in-depth understanding of the dynamics contradictions create in a given system, and the complex process through which activity systems transform themselves. As already mentioned, Engeström (1999b; 2000a; 2014) surmises that there are four distinct levels of contradictions that exist in an established activity system. Engeström (2000a; 2014) argues that although contradictions are interrelated, there also exist substantive differences between them and they should therefore be explained distinct from one another. One way of conceptualising the four levels of contradiction is to consider them as moving from a base level, upwards through an activity system and spiralling out to influence related activity systems. The four levels of contradiction are named as: the primary, the secondary, the tertiary and the quaternary levels (Foot & Groleau, 2011).

Foot and Groleau (2011) explain how the primary contradiction with a system can be found in every society with market-driven economies. These contradictions, therefore, reflect the fundamental tension that exists in every realm of such a society. Scholars (Engeström, 2000b; 2014; Foot & Groleau, 2011) explain how these irresolvable tensions exist as a direct result of the dialectical contradiction between *use value* and *exchange value* within each node of the activity system that exists in a capitalistic society. *Use value* can be described as the inherent value of everyone and everything, while *exchange value* refers to the commodity value of an object or person in a market-driven socioeconomic climate. It is postulated by scholars (Engeström, 2000b; Foot & Groleau, 2011) that even if we are successful at working out the contradictions at the other three levels where contradiction manifests, if the society remains driven by a market economy these tensions will always be present. Primary contradictions are endemic to all aspects of activity systems and exist regardless of emergence or growth, whereas, secondary, tertiary and quaternary contradictions of a sequence explain the cylindrical and expanding development so characteristic of CHAT.

Secondary contradictions take place between two nodes/components of an activity system in conflict with one another (Engeström, 2000b; 2001). This type of contradiction prompts the primary contradiction in the system to surface and take on the form of a specific problem as tensions build between two separate components of an activity system. Scholars (Foot & Groleau, 2011; Engeström, 2014) describe how secondary contradictions exist independently of tertiary contradictions. Tertiary contradictions arise within an activity system when the *object* of a more 'culturally advanced' *activity* is introduced into the system that has been experiencing secondary contradictions. Foot and Groleau (2011) argue that the motive to introduce a different or a new *object* into an activity system is aimed at finding some relief from one or more of the secondary contradictions that exist. Essentially what this means is that the power relations within the activity system ultimately determine whether the alternative *object* that brings about a tertiary contradiction results in change in the central activity system (Foot & Groleau, 2011).

4.3.4 'Consciousness': The realisation of learning

Scholars (Vygotsky, 1978; Leont'ev, 1981) describe consciousness as a central principle of CHAT in that the realisation of learning emerges out of 'social practice' and that this can be considered as primarily a social accomplishment. Blanton, Simmons and Warner (2001, p. 438) describe the concept of consciousness in activity theory as learning that is "achieved though situated moments" in the interactions between the individual, or individuals, the materials and the social environment, where the transactions between the active individual or individuals and the active environment co-construct one another (Blanton, Simmons & Warner, 2001; Oswald & Engelbrecht, 2013). This can be interpreted by saying that the realisation of an outcome through collective activity is not the accomplishment of one particular person's efforts, rather it is the 'achievement' of the entire system with all the transactions that emanated through the interconnectedness and collaboration of all components.

4.3.4.1 Towards an understanding of actions and activity in activity systems models

Many *actions* or events are performed directly by subjects in an activity system to realise the goal of *activity* for the *object* of the activity system. Actions are those observable events that are enacted by the *subject* towards achieving the *object* (Kuutti, 1996). The many actions that are taking place simultaneously by all *community* members within an activity system over time with the intention of achieving the goal of the *object* is the *shared activity* of that activity system. Kuutti (1996, p. 30) explains that "activities are realized as individual and cooperative

actions, and chains and networks of such actions, related to each other by the same overall object and motive." When an action is planned it is done consciously and this is often termed as an "orientation" (Kuutti, 1996, p. 32). This action is then performed repeatedly upon the *object* by the *subject* to attain the goal. The more the action is repeated, the less conscious thought is applied to it by the *subject* and gradually "the orientation phase will fade and the action will be collapsed into an operation, which is more fluent" (Kuutti, p. 31). Therefore, the "orientation" has become an "operation" (Kuutti, 1996, p. 32). This newly acquired operation is then performed unconsciously by the *subject* upon the *object* and can then be considered a mastered skill. Once the mastered skill has been achieved this then opens the possibility for the person, or in the framework of an activity system, the *subject*, to acquire more skills (Kuutti, 1996). In this regard the process starts again with a conscious planned activity, which in time will develop into an unconscious operation. In this way the *subject* changes as he or she acquires more skills. This change cannot occur without the contribution of the *object*. As the object is acted upon by the subject and the object changes, so the properties of the *object* penetrate the *subject* and cause a subsequent change. This phenomenon is called 'internalisation.' As *subjects* in turn change through their on-going interactions with the *object* this has a reciprocal effect that sees change in the entire system (Kuutti, 1996). This change and the change that occurs through the process of working out contradictions and tensions between the components of the activity system, or other activity systems that share a common *object* with the activity system, leads to transformation of the object of activity (Kuutti, 1996).

4.3.5 Understanding 'activity' within a system

Blanton, Moorman and Trathen (1998) describe how the concept of *activity* in a system, between its constituent components, is the appropriate unit of analysis when explaining learning and development. In other words, it becomes the basic point of enquiry and the basic context where development and learning take place (Blanton, Moorman & Trathen, 1998). At this juncture an understanding of *activity* is worthwhile. If one considers a school as an activity system then *activity* cannot be defined as a one-off lesson, moment in time or interaction between components; it is the continuous interconnected interaction between components in a system that is typified by ongoing consumption and production, which takes place over an extended period. This fact is an important aspect to consider for a researcher. If the intention of the scholar is to study *activity* in a system, he/she cannot do it by simply observing and recording data from 'snapshots' or isolated lessons only, as this is not a true reflection of the activity taking place within a complex activity system. In order to take account of the *activity*

in a system it would be necessary for a researcher to be embedded within that system for a sustained period of time and to obtain data from multiple sources within the system. It would be worthwhile for the researcher to engage with the *subject* component and people that represent the *division or labour* component to gain a balanced perspective of the nature of the activity taking place within the activity system.

4.4 Suitability of Cultural Historical Activity Theory to this study

In this section I will describe how the fundamental guiding principles and tenets of CHAT apply to my study, and why I argue that using CHAT as a theoretical framework was essential to extrapolate my data and interpret my findings, taking into account the significant influence of all variables or factors acting on teachers and learners within the complex system of a school.

To expand on this: first, Roth and Lee (2007) describe a unit within a complex system as a phenomenon that cannot be analysed in isolation, but can, however, be analysed in terms of its component parts although, critically, none of these component parts can accurately be understood apart from the other component parts. To gain an in-depth understanding as to what was affording or constraining inclusive teachers from teaching inclusively I could not have examined teacher's actions in the classroom in isolation from his/her working condition rules, restraints, pressures, access to tools (both material and innate), agency, relationship to authority and his/her interpretation of the expected outcome for the activity of teaching over time.

Secondly, Roth and Lee (2007) speak of dialectics and how they are fundamental entities of what CHAT is. Roth and Lee (2007) further explain the relevance of this when they expand on how the categories and components within activity systems are 'dialectical entities' where mutually exclusive but reciprocal elements are combined together. The concept of dialectics then implies that these elements have built-in contradictions. It is described how the dialectical entities that exist are represented graphically by means of a vertical line (|) called the *Sheffer Stroke.* Examples from a basic Second-Generation Activity System (Engeström 2000a; 2001) include the *individual* | *collective* and *personal agency* | *structure* (Roth & Lee, 2007). Regarding my research, where I examine the actions and activity of teachers as the subject components of schools (activity systems) I take cognisance of the dialectical entities that exist within. These dialectical entities include both the individual teacher and the collective, where the collective is made up of, but not exclusively, other teachers, management staff, parents, support staff and the learners. I also recognise the dialectical relationship between the teacher's innate motives that he/she brings to his/her work, in an effort for him/her to affect change in

the system, through actions and activity and the structures governing the functions of every aspect of the school environment to ensure that it is productive (Roth & Lee, 2007).

In my study I was less interested in the outcomes of the individual or isolated specific lessons (actions). Rather, it was the entire dynamic *activity* over time of the teacher teaching to achieve the outcomes of the activity system. This required me to observe many lessons within the context of the dynamics of the whole activity system, of which individual lessons are events or actions that are overtly and covertly affected by the influence of other components that are a part of the same activity system. This resonates with the fundamental principles of activity theory which explains how the term *activity* is not to be equated with brief events (individual lessons) which have definite beginning and end points, rather, *activity* is better understood as an evolving complex structure of mediated and collective human engagement (Roth & Lee, 2007). That is why CHAT scholars (Roth & Lee, 2007) define the concept of learning as taking place within activity systems. Roth and Lee (2007 explain how learning is equivalent to the mutual change of the *object* and the *subject* in the process of activity. Humans change the material world and life in society just as the very settings in turn mutually transform agents (teachers) and the nature of their interactions with each other (Roth & Lee, 2007).

Components in the system must be understood as threads that make up a bigger strand or fibre of a collective whole. This metaphor implies that these 'fibers' or 'threads' then ultimately combine to form the very basic and evolving fabric of society (Engeström, 2009, p. 23). In describing Third Generation Activity-Theory, theorists (Engeström, 1999) explain how all activity systems are part of an interconnected network of other activity systems. This gives rise to the possibility that *contradictions* can transcend the individual *subject* and its relations or influence on other components in the activity system (Roth & Lee, 2007). Resolutions between tensions or contradictions between interacting activity systems (university | school or home | school) are only possible when systems begin sharing ontogenetic histories (Roth & Lee, 2007).

4.4.1 Inclusive teaching as the object of activity

It has been mentioned how I investigated the existence of inclusive teaching as a possible object-of-activity at four purposively selected and separate schools. In Chapter Three I discussed ideas pertaining to what it means to teach inclusively as the pedagogical approach of teachers when teaching learners with a wide range of different learning needs. I surmised that the ideas behind what it is to teach inclusively are complementary to the theory of CHAT and Engeström's (2001) activity systems models. First, the complexities associated with providing

meaningful education for all and not just for some learners in schools as purported by scholars such as Florian and Black-Hawkins (2011) should recognise that the ideas associated with inclusive teaching must co-exist and compete with other ideas in schooling environments. This resonates with CHAT's second basic principle of the multi-voicedness of activity systems which recognises that the many voices, ideas, opinions and motivations are simultaneously in effect in any activity system as it engages in activity around a motivated *object of activity* (Engeström 2001). Secondly, Florian (2015a; 2015b) outlines how the ideas of inclusive teaching require a shift in thinking about how teaching and learning is operationalised and conceptualised. This move needs depart from a view which is so often associated with 'bell curve' thinking (Florian, 2015b). This statement of intent, resonates with the concept of the disruptive power of new objects introduced into an activity system as outlined by scholars (Blin & Munro, 2008) and the fourth basic principle of CHAT, which describes the effects of contradiction that emerge between *objects* and *tools/artefacts* and which ultimately results in evolution and expansive transformation in activity systems (Engeström, 2000a; 2001). Thirdly, scholars (Florian, 2015b; Florian & Black-Hawkins, 2011) draw attention to the instructional practice of teachers who, often individually, have sought strategies for inclusive teaching through their multitude of experiences to confront 'bell curve' thinking. This individually motivated action for change and transformation of the *object* resonates with Vygotsky's (1978) principle of 'agency' where an individual as the *subject* in an activity system can have the ability to change the world and his or her behaviour towards an *object.* Finally, I show in the literature review that the ideas of inclusive teaching are underpinned by a social and human rights discourse and recognise the historical challenges faced when trying to implement a new educational mindset. This can be directly linked to the third principle of CHAT which is that of 'historicity.' This principle describes how no system can be understood objectively in its present state, but to understand how it exists in the present a researcher needs to consider the 'historical sediments' and evolutionary 'buds' that over a sustained period of time have shaped the activity system through a changing motives system which ultimately contributed to the design of the object of activity (Ellis 2011). This synergy between the ideas of inclusive teaching and CHAT as the theoretical framework allow me to explore my research questions in a constructive manner.

CHAPTER 5

LITERATURE REVIEW: THE THEORETICAL TOOLS OF CHAT FOR ANALYSIS OF SCHOOLS AS COMPLEX SYSTEMS

5.1 INTRODUCTION

This chapter reviews how scholarly ideas and research findings emanating from Cultural Historical Activity Theory (CHAT) have relevance for the analysis of my findings. The first section provides practical tools or methods with which complex, detailed and multi-levelled data sets can be approached and analysed within a CHAT framework. These analytical tools assist a researcher in navigating the complexities associated with research into the functioning of components within activity systems, where it can be distracting and overwhelming to focus on critical elements that are relevant to the questions while simultaneously accounting for the 'noise' in the background from other components. The second section introduces the theoretical tools of 'relational engagement' and 'relational agency' that I use in my data analysis process to examine the complex and influential relationships that exist within and between the *subject* component (teachers) whose teaching practice is focussed upon (Edwards, 2007, p. 4). Directly relevant to relational engagement and agency is Engeström's (1999; 2014) metaphor of *knotworking. Knotworking* is a specific from of interconnection between actors in a system with which the rapidly changing collaboration between subjects in an activity system can be interpreted and understood. The third section introduces the concept of 'disruptions' as they relate to contradictions or tensions that emerge in activity systems and the resultant transformation of the object. The fourth part of this chapter contextualises how CHAT has been used as a theoretical lens in other educational research.

5.2 Using data analysis models for CHAT research

There exist challenges facing researchers who focus on researching the workings of complex social systems with large volumes of qualitative data. A critical challenge to overcome is that researchers are faced with multiple tasks and processes associated with the organisation of the findings while simultaneously not losing focus from the main objective. When considering the fourth basic principle of CHAT, that of contradiction, it would equate to the challenge of identifying the tensions and contradictions that affect the nature of the activity in relation to the *subject's* ability to attain the *object* (Yamagata-Lynch, 2007). For a scholar utilising an activity systems' framework it often becomes difficult to manage the simultaneous cycles of

activities initiated by multiple individuals directed to attain the same object. To address this difficulty, researchers can adopt Rogoff's (2008) Three Planes of CHAT Analysis, to focus their enquiry, namely the *personal plane*, the *interpersonal plane* and the *institutional community plane*. In practical terms a researcher can use an example of a hypothetical research project that investigated teaching practice in a school setting. The school operates as a complex activity system with its six components all operating through shared activity to achieve the *outcome* of learners acquiring a desired *object,* in this case a type of education. From teacher observations and teacher interviews there will exist volumes of qualitative data that would be complex and difficult to thematically code. However, it becomes more manageable when using Rogoff's (2008) Three Planes of CHAT analysis. The *personal plane* considers data specific to teacher driven initiatives displayed in the classroom setting or articulated through interviews. The *interpersonal plane*, on the next expanded level, considers data that relates to groups of teachers working towards the common attainment of the object. These would be interactions between the subject component and the community component in the school system. Finally, the *institutional community plane* considers data that is gathered from the activity system (school) that considers policy driven initiatives (Rogoff, 2008).

Another challenge facing a researcher is that of gathering data in complex social settings when other *object* focussed activities unfold simultaneously in the setting of research. To address this problem, the researcher can consider Barab and Squire's (2004) *Activity Settings* method. According to Barab and Squire's (2004), *Activity Settings* are environments that situate individual activities in relation to other activities with similar goals. If I consider the school as an *activity setting*, with a researcher mostly interested in eliciting findings pertaining to how a certain teaching practice used by a teacher influences the learner's ability to learn, I would need to isolate the teaching practice I am interested in from other activities also focussed on the learner. Some examples of other activities operating simultaneously in a classroom or school environment could be multiple pedagogical approaches that are relevant to certain academic subjects as well as the influence of the school's ethos. Using *Activity Settings* would allow researchers to isolate the relevant data pertinent to their study from other activities acting simultaneously to the activities under observation. In the next section I examine 'relational engagement' as a theoretical tool to allow for a more focussed analysis of my findings specific to the teachers or the *subject* component who are the focus of the research at the schools.

5.3 Relational engagement and relational agency as theoretical tools to focus this study

Stetsenko (2011, p. 474) proposes that "the core of human nature and development has to do with people collaboratively transforming their world in view of their goals and purposes." This is framed by the concept of active engagement represented as:

> Active engagement with the world therefore represents the foundation and the core reality of development and learning, mind and knowledge—where relationality as co-being and co-existence is dialectically superseded by the more agentive stance of acting in or engaging the world (Stetsenko, 2011, p. 479)

It was found by scholars (Engeström, 2014; Edwards 2007) that when considering data through the lens of the concept of 'relational agency' and the associated heuristic of knotworking it was revealed that there was the potential to transform the existing *object*. It is postulated by Edwards (2007, p. 11) that 'relational agency' can be utilised as a conceptual tool for contesting the *object of activity* embedded in a complex activity system (school). It is also argued by Edwards and Mackenzie (2005) that 'relational agency' is concerned with the capacity for a person to actively seek out and ask for support to achieve their tasks, and in turn to offer support to others. Edwards and Mackenzie (2005, p. 294) explain that a person's ability to engage with the world in which they exist and work is "enhanced through doing so alongside others." This accounts for the 'relational' dimension of the concept of relational agency.

'Relational agency' can be broadly defined as the capacity to work with others to expand and transform the object that one is working on by bringing to bear the sense-making of others and to draw on the intellectual and physical resources they offer in response to the "sense-making" (Edwards, 2007, p. 6). Where 'relational agency' differs from a pure CHAT alignment is that as a theoretical tool it focuses more directly on the nature of relationships that compromise a network of expertise and argues for greater agency explaining relationships between the individual and the social in working life (Billet, 2006; Edwards, 2007). From another point of view 'relational agency' resonates with the importance of personal understandings gained in other situations when mediating interpretations in new situations. There is an argument for research to give attention to the interactive negotiations that people make as they work in and with the social dimensions that exist in activity systems (Edwards, 2007). Also, 'relational agency' is deemed to be a capacity for engagement that is only brought into play when the situation or the circumstances within an activity system allow for it. The 'relational agency'

may emerge in both formal and informal work settings with professionals with expertise who are known and yet unknown to the individual. From a practical perspective, in Edwards's (2007, p. 11) study, it was reported that the 'relational agency' between workers and users at a "drop-in" care centre helped the users of the centre become more expert at drawing on the available resources and care in the existing system.

For the purposes of this study, I considered it necessary to develop nuanced theoretical tools, consistent with the ideas of CHAT, when examining what factors constrain or afford teachers from teaching inclusively. I regard this as important, as the research project was not a general analysis of the functioning of activity systems, but rather a focus on the directed *activity* of *subjects* by *rules* and the *division of labour* component to expand an *object*. In other words it is focussed on teachers and their ability to teach inclusively as directed by school leaders as well as the ethos of the school that dictates school functioning. For this purpose, I considered the value of the theoretical tool called 'relational engagement.' Relational engagement specifically draws attention to the *subject* (teachers) within an activity system (school) and how they interpret the *object* through *shared activity* to achieve the intended outcomes. More specifically, I apply the conceptual ideas associated with 'relational engagement' in a transformational manner to support Edwards' (2007) idea of 'relational agency.' For the purposes of my analysis 'relational engagement' informs 'relational agency' and refers to the capacity of *subjects* (teachers) with a shared *object* offering support to one another through collaborative moments and in turn asking for support from others in a complex and expanded system. This idea is built on the premise that a *subject's* (teachers) ability to change the world around them, or to promote the achievement of an *object* through activity within an expanded set of activity systems, is only enhanced when doing it alongside others through collaborative interactions. Utilising 'relational agency' as a theoretical tool is particularly applicable within the context of this study. This is because 'relational agency', according to Edwards (2007, p. 13), focusses on the "co-evolving" *activity* that emanates from the reciprocity of the *subject-object* relationship and the existence of a co-evolving relationship between people who share a common *object.* Considering 'relational engagement' and specifically 'relational agency' as a theoretical tool allows for human agency and subjectivity to emerge from the findings. This is of relevance as this project found me physically embedded in school systems to specifically examine inclusive teaching shown by teachers and their shared experiences as they interact with learners with a range of different learning needs. In CHAT terms, 'relational agency' can best be described as an examination of the "capacity" of *subjects* to "work with others" in order

to expand the *object* that is the intention of shared *activity* in the system (Edwards, 2007, p. 14).

If one considers the theoretical background of CHAT, it becomes evident that it does not deal easily with the idea of the existence of individual agency in a collective system. For example, within Engeström's (2001) activity systems the emergence of the *subject* component happens almost accidentally, or by default if there is enough slippage within the system to allow for it. To understand the emergence of subjectivity or individual agency I turn to Stetsenko's (2005) work on Leont'ev's concept of *object motive*, which draws on characteristics of *object*-orientated action. In her work she explains the dialectic relationship between the *subject* and the *object*. In this co-evolving relationship where we are the *subject*, the *subject* works upon the *object* and reciprocally the *object* works back against the *subject* and impacts on our subjectivity and how we then subsequently approach the *object* in future interactions (Stetsenko, 2005). Stetsenko (2005) describes this transactional relationship as existing within the cultural system and which moves along a horizontal plane. This explains individual agency but in terms of 'relational agency.' Consider, for example, two teachers working towards the same *object*. This process would see the emergence of two subjectivities and would encourage joint action on a shared object. Edwards (2007) describes five features of 'relational engagement' and more specifically, 'relational agency.' First, there exists the "possibility" of contesting interpretations of the *object* by *subjects* with the same objectives; secondly, the "mobility" of the "changing nature" of the *object*; thirdly, the "fluidity of relationships" between different people where these relationships may shift with *action*; fourthly, the "location of joint action" within systems if they are able to deal with expanding understandings of the evolving object; and finally, the "expanding objects" occur within co-evolving systems (Edwards, 2007, p. 13). These features of 'relational agency' are considered in my study as I examine the data pertinent to teachers engaging with the object of inclusive teaching. Here I examine the co-evolving nature of the *object* and the relational engagements that teachers in schools engage in with each other and various other expanded activity systems (universities, department of education for example) as they collaborate around a shared *object*.

5.4 The concept of 'knotworking' in relational engagement

When considering relational engagement and relational agency as theoretical tools to assist with the interpretation of findings, scholars (Engeström, 1999; 2014; Daniels Leadbetter, Warmington, Edwards, Martin, Popova, Apostolov, Middleton & Brown, 2007; Edwards,

2007) argue that it is important to understand the potential of collaboration, and in some cases trans-disciplinary collaboration between people who come together to find joined-up solutions to meet the complex needs of their shared *object*. Their associations and collaborations are often expanded out of one activity system and are often between actors from different activity systems who just happen to share the same *object* (Engeström, 1999; 2014). These collaborative moments between actors are often brief, where the entire reason for their existence is around the shared *object* and once the shared activity has served its purpose these moments dissolve as quickly as they originated (Engeström, 1999). Scholars (Engeström et al., 2012) further explain how knotworking is different from conventional ideas of teamwork in that continuity is connected to the object of enquiry and not the practitioners. They explain how the practitioners and the initiators of the knots can always change.

To explain the relevance for this research project, consider the hypothetical example of a teacher who briefly collaborates with a particular learner's counsellor over an emotional issue; these two unrelated 'strangers' operating as *subjects* within separate but linked activity systems in society come together briefly to collaborate in an effort to better enhance their ability to achieve the goals of the *object*, with the object being the education of the child. Once this brief 'joining up' has served its purpose the relationship dissipates as quickly as it formed with both actors' subjectivity 'transformed' in some way from the experience. This transformation and subsequent increase in personal subjectivity for the different actors is central to the concept of 'relational agency' which was elaborated upon in the previous section.

If one considers the process or '*actor* collaboration' it is evident that terminology that includes words like networking or teamwork are insufficient to mine the complexities of this type of actor engagement associated with Edwards's (2007) concept of 'relational agency' when considering shared activity from a CHAT perspective. For this reason, I evoke Engeström's (1999; 2014) concept of knotworking. Knotworking, as a unique conceptual definition of a type of collaborative action, goes beyond typical teamwork and networking and is applicable to 'relational engagement' (Engeström, 1999; 2014). Scholars (Daniels et al., 2007, p. 526) describe knotworking as "a rapidly changing, distributed and partially improvised orchestration of collaborative performance which takes place between otherwise loosely connected actors and their work systems." It is described by Daniels et al. (2007, p. 526) that "in knotworking, various forms of tying and untying of otherwise separate threads of activity takes place." This is in order to achieve a co-configuration or continued development of the *object* (Oswald, 2010; Daniels et al., 2007). Knotworking plays out continuously, both between actors within the

activity system and with actors in other systems, where the actors have loose associations with each other and only collaborate briefly within the interest of the shared *object*. Another feature of Engeström et al. (2012) knotworking concept is that no single actor or *subject* has sole responsibility for, or total control of the achievement of the goals associated with the *object.*

5.5 Disruptions as a concept through the lens of activity theory

Activity in complex systems is stimulated by the shared motivation of a collective group of *subjects* with the common objective of transforming a common *object*. The actions upon the *shared object* are mediated by the *subjects* through mediated *tools/artefacts* which can be physical or psychological. Blin and Munro (2008) argue that these actions or chains of actions are directed towards a finite goal for the *object*. Another way for us to understand the functioning of activity systems is to view them as 'conceptual frameworks' that allow us to bridge the gap between 'motivation' and 'action' which then allows those researching social systems to account for the processes at various levels of acting in the world (Kaptelinin & Nardi, 2006). However, no activity system is ever static or immune to external influence from other activity systems that might share one or more of the components with the activity system in question. Also, innovative new *tools, artefacts, objects* or *subjects* might be introduced to an existing activity system which can inevitably result in some level of change or ultimately transformation.

When the introduction of a new *tool, artefact* or *subject* results in an alteration to the internal structures or processes within an activity system, it can be inferred that the activity system has been disrupted. Blin and Munro (2008) explain that if this disruption causes contradictions and the disruption manifests itself, such as in the case of a school through the creation of new teaching methodologies, curricula or procedures, it can be inferred, in line with Engeström's (2000a; 200b) theory of expansive learning, that the disruption is expansive. In other words, genuine disruptions in systems lead to expansive transformations which significantly change the nature and structure of *activity* directed by a collective of *subjects* who share a common *object*. In many cases the anticipated disruptions in systems do not come to fruition when a new element is added to an activity system. Sometimes all the new element does is cause an 'interruption' which is far less seismic or significant and does not lead to any form of expansive transformation (Blin & Munro, 2008). Therefore, by focussing on the emergence of contradictions in activity systems and why they are often unresolved, allowed me to gain some level of insight into 'phenomena of resistance' (Blin & Munro, 2008) to education reform.

Thus, the understanding of the formation and resolution of conflict/tension in systems that lead to the existence of contradictions must be central to research. By focussing on contradiction, we can gain an ultimate understanding of why resistance can exist but there is a subsequent lack of transformation in systems when a new element or concept is added.

5.6 A review of studies that have used Activity Theory in education research

Engeström's (2001) second and third generation activity models have already been used in education research. In this sub-section I examine some pertinent examples from the literature, both in South Africa and internationally.

Oswald (2010) introduced the *Index of Inclusion* as an inclusive education programme for teachers in a primary school in the Western Cape province of South Africa. Scholars (Booth and Ainscow, 2002) describe the Index for Inclusion as a compilation of materials to support schools - initially in British schools - in the processes of inclusive school development. What was pertinent for her was that teacher learning as an *activity process* needed to be researched within the context of the whole school. For this reason, Oswald (2010) selected Engeström's (2000a; 2001) activity systems models as the theoretical framework as it fulfilled the following criteria: first, using activity systems models allowed her to represent the complexity of the whole school system; secondly, the school could be analysed within its contextuality; thirdly, being culturally mediated, it is specific to human beings; and finally, it is dynamic and can account for transformation (Foot, 2001; Oswald, 2010). In another study, Russell (1997) investigated 'writing genre' within the context of society and in formal schooling situations. Russell (1997) illustrates the relationship that various activity systems in society have to one another when they have a shared outcome or common components. This allows for the relationships between classroom activity systems and other activity systems in society to be explored. CHAT has been used when investigating the concepts of personality formation and that of human subjectivity in the field of psychology. Stetsenko and Arievitch (2004) explain how the use of CHAT as a conceptual framework can be beneficial in reclaiming the concept of the 'self' or human agency in a field dominated by profoundly social and relational views of the self.

Furthermore, there are other studies in the extant literature, where scholars adopt a CHAT framework in their research on inclusive education. Artiles and Dyson (2005, p. 37) report on a study where the authors set out to "explore a tension that is at the heart of all attempts to trace

international ‘movements’ in education.” Artiles and Dyson (2005. P, 59) explain that, to achieve this objective, the concepts of CHAT are adopted to describe the alternative practices used by teachers, that the authors called interruptions, contradictions or disruptions in “the context of the taken-for-granted reproduction of established practice.” In another study, the scholars Hancock and Miller (2017, p. 16) conclude that “CHAT has much to offer researchers and teacher educators for inclusive education preparation.” The authors explain that “by identifying activity systems, CHAT attends to context, recognises varied influences, and is sensitive to opportunities and challenges for inclusive praxis” (Hancock & Miller, 2017, p. 16). In another study, Waitoller and Kozleski (2013, p. 20) argue that “CHAT provides a set of useful analytical tools” in order to advance understandings of the complexities of collaborating across schools and universities and between the relevant professionals in these institutions. Also, the scholars Engelbrecht, Savolainen, Nel and Malinen (2013) show that data analysed within a CHAT framework indicate, that in both South Africa and Sweden, the historical commitment to inclusive education had mediated teachers’ views in each country in line with complex local conditions. Finally, Pacheco (2012, p. 127) describe how the “tacit and small-scale efforts” of Latino communities in Stillwater USA generated historically new artefacts and tools where older ones no longer sufficed.

There is also evidence of scholars (Windschitl, 2003; Patchen & Smithenry, 2014) using activity system frameworks to investigate teaching in classroom contexts. Further examples include those using it to evaluate novice teachers’ transitions into the workplace (Saka, Southerland & Brooks, 2009), student engagements with Science classroom laboratory work (Andree, 2012) and teachers moving from teacher-orientated to student-orientated inquiries (Patchen & Smithenry, 2014). In all these examples CHAT frameworks allowed for the recognition of educational practices to exist as interrelated parts of their respective ‘whole’ without detaching those parts from their context.

5.7 Conclusion

In this chapter I described how specific concepts and theoretical tools of CHAT are used in the data analysis and interpretation component of the study. For example, Engeström’s (1999; 2014) concept of knotworking and the theoretical tools of relational engagement and relational agency are described in relation to how they can explain those instances of inclusive teaching that emerge from the findings. What is also explored in this section are examples from the

literature of both CHAT and Engeström's (2001) activity system models being used in educational research. In the next chapter I describe the methods used to collect the qualitative data and extrapolate and analyse the emergent findings that were obtained from myself being embedded at the four separate research sites.

CHAPTER 6

METHODOLOGY

6.1 INTRODUCTION

In Chapter One the aims and objectives of this study were introduced. In Chapter Six the way in which this research project was implemented is described. First, the research frameworks that inform the methodology are discussed. Secondly, I describe the methodology around qualitative research. Thirdly, I account for the methods used to gather, analyse, interpret and present the data. Fourthly, issues of ethics and trustworthiness are described. Finally, the context of the study is described and narratives that explain the backgrounds of the participants and the research sites where the findings were gathered are provided.

6.2 Research frameworks

From an analysis of the literature on research methodology there is consensus that certain frameworks of thinking inform the research methodology and the approaches to educational research. In this section the various frameworks that are relevant to my study are considered.

6.2.1 Transformative framework

The project is located within a transformative framework that emphasises social, political, cultural, gender and ethnic factors as significant contributors to the design and interpretation of a study (Mertens, 2008). The transformative framework emphasises participation and collaboration between researchers and participants and reflects an agenda for change (Creswell, 2013). Mackenzie and Knipe (2006) explain how the choice of a framework influences the way knowledge is studied and interpreted, and in turn, sets down the intent, motivation and expectations for the research. Creswell (2013) argues that a researcher who subscribes to a transformative framework believes that a scientific enquiry needs to be intertwined with a political agenda to address issues of social justice and the struggles of marginalised people. It is envisaged that transformative research contains an agenda for reform, which may ultimately change the lives of the participants, the institutions in which they work and live as well as the researcher's life (Creswell, 2003). Scholars consider the epistemology of the transformative paradigm. Mertens (2010) explains that researchers need to consider the nature of knowledge and the relationships between stakeholders in the research process. The author explains how

researchers need to consider the necessity for an interactive link between the researcher and the participant, that knowledge is socially and historically situated, power and privilege are explicitly addressed and there needs to be an emphasis on the development of a trusting relationships between all parties. From an ontological perspective Mertens (2010, p 11) explains that a transformative paradigm "rejects cultural relativism and recognizes influence of privilege in sensing what is real and consequences of accepting versions of reality. Multiple realities are shaped by social, political, cultural, economic, ethnic, gender, disability and other values." Finally, Mertens (2010, p. 11) explains that from an axiological perspective, the transformative paradigm considers; the respect for "cultural norms of interaction," the ethics of human rights and the increase and promotion of social justice.

A transformative framework resonates with the objectives of my study where the focus is on the improvement of the lives of marginalised people. In the case of this study, this is achieved by investigating inclusive teaching and its capacity to improve the quality and accessibility of education for all learners in the classroom by meeting the challenge of teaching learners with a wide range of different learning needs. The findings I present in this study are intended to transform our understanding of how the hidden motives and contradictions within schools either constrain or afford inclusive teaching.

6.2.2 Interpretive framework

My research project is also located within an interpretive framework as I wanted to understand the meaning the participants attributed to their subjective experiences and the world (Merriam 2002; Willig, 2008). Guba and Lincoln (1994, p. 110) describe how interpretive epistemology is one of subjectivism and is based on real world phenomena or events. It is suggested by Scotland (2012) that interpretive methodology is directed at finding understandings of phenomena in the world from an individual's perspective. Cohen, Manion and Morrison (2013) explain how, when considering research through an interpretive lens, that not only are individuals' subjective perspectives taken into consideration, but their interactions with others and the historical and cultural contexts which they inhabit are also considered. By utilising an interpretive approach, the constructs that emerge from the data production is provided by individuals and events and not reduced to simplistic isolated incidents or interpretations. This means that new layers of understanding are discovered as phenomena are described (Cohen, Manion & Morrison, 2013). Interpretive research is usually indicative of a research design where findings emerge inductively from qualitative findings. Therefore, the research questions

used in interviews need to be broad, semi-structured and open-ended to ultimately elicit interpretations from the participants, rather than directed responses, as would be the case with a highly structured survey or interview schedule (Scotland, 2012; Cohen, Manion & Morrison, 2013). With regards to ontology of the interpretivist perspective, the scholar (Tuli, p. 101) "views reality and meaning making as socially constructed and it holds that people make their own sense of social realities." From an epistemological position, the authors explain how, unlike the positivist perspective to research "an interpretivist/constructivist perspective, sees the world as constructed, interpreted, and experienced by people in their interactions with each other and with wider social systems in society" (Tuli, p. 100). Finally, scholars refer to a balanced axiology with it comes to the interpretivist perspective. Kivunja and Kuyini, (2017, p. 34) Explain how "a balanced axiology assumes that the outcome of the research will reflect the values of the researcher, trying to present a balanced report of the findings."

Taking these descriptions of interpretive theory into consideration this project slots in well with this framework for the following reasons: first, I am reliant on the qualitative data that I elicited from interviews with teachers and principals and have taken these participants' subjective perspectives of their world into consideration. These subjective perspectives are influenced by both their intrinsic feelings and the influence of extrinsic or environmental circumstances that form their opinions and dispositions. The semi-structured interviews were designed with open questions which allowed for the participants' own interpretations of events or phenomena that exist in their unique contextual environment. Secondly, by observing the teachers teaching in their classrooms and conducting reflective interviews with them on phenomena observed in their lessons, I considered their interactions in authentic 'real world' circumstances that considered their historical and cultural contexts. Finally, I analysed the qualitative data that emerged from the study through Engeström's (2001) activity systems models, as informed from a CHAT framework. This approach allowed me to consider the interconnected and complex relationships between all the components of the school, as an activity system, and not just a teacher (one component) in isolation. In the next paragraph I describe how the interpretivism position aligns with CHAT as my chosen theoretical framework.

It has been extensively discussed how I use CHAT as a theoretical framework to inform my research design. It was necessary that my position towards the research process complimented my theoretical framework. Interpretivism offered me that position as it compliments CHAT. Eisenhart (1988) explains that central to interpretivism is that it is an idea or position that

considers all human activity as a social and meaning-making experience. This resonates with CHAT, where Engeström (2001) describes the shared activity of all role players in a complex system, acting together towards the shared *object* and its intended goals and outcomes. In other words, both CHAT and the interpretivism position recognise how meaning, actions, context and the unique situation under investigation are inextricably linked or intertwined. From an interpretivist perspective all human interactions are social constructions that exist only by social agreement or by consensus or agreement amongst participants within a particular context or situation (Eisenhart, 1988). This would include the day-to-day human interaction experienced by a teacher in his/her contextual environment. From both an interpretivism position and a CHAT perspective it makes no sense to record the beliefs or opinions of a research participant without considering the context of society and the complex system in which he/she shares Edwards's (2007, p 14) concept of relational agency. Eisenhart (1988) describes how identifiable social groups, which could be a teaching faculty and its leadership, construct coherent systems of belief and actions from intersubjective meanings. These intersubjective meanings are constitutive of the social matrix in which individuals find themselves existing and interacting. The interpretivism perspective compliments CHAT in that this position allows a researcher to align the goals of the study to provide information, though data collection and ongoing analysis, thus allowing him/her to make sense of the world from the perspective of the research participants. This is in line with the research questions that directed and informed this study, where the perspectives of teachers and school principals, who work in the context of their schools, engage in shared activity with other stakeholders and components of the system.

Finally, the literature illustrates that there are differences and similarities between a transformative paradigm and an interpretivist/constructivist paradigm. For example, (Romm, 2015) describes how interpretivist paradigms are primarily characterised by using qualitative data collection methods in a hermeneutical manner. Whereas, (Mertens, 1999) explains that a transformative paradigm can involve quantitative, qualitative, or mixed methods, which needs to be dependant, to some extent, through consultation with the key participants in the research process. A similarity between the interpretivist/constructivst paradigm and the transformative paradigm relates to their views of knowledge creation in the research process, where knowledge is seen to be socially created. In conclusion, although certain similarities and differences between these two paradigms exist (Romm, 2015, p. 425) argues "that the transformative paradigm may benefit from appreciating the constructivist insistence that all

that researchers can ever 'find' are ways of constructing visions of realities." Whereas, "constructivist-oriented authors can benefit from the axiological tenet that Mertens offers as a basis for deciding to which constructions researchers should feel allegiance to give more voice" (Romm, 2015, p. 425).

6.3 Research design

As discussed, the research design of this study was framed by the interpretivist and transformative paradigms. Mertens (2010, p. 11) explains how, with the transformative paradigm, assumptions about appropriate methods of systematic inquiry suggest that "contextual and historic factors are acknowledged, especially as they relate to discrimination and oppression." This is critical to this study, and aligns with the conceptual framework of CHAT, as the study explores the hidden, historical needs that inform the motives behind the object of the activity at each school site and critically, investigates the oppression and discrimination against children with different learning needs. In addition, this study employed a multi-site study research design. This decision was made as I considered a multi-site case study to be firstly, more, robust and compelling than a single-site design and secondly, it provided me with comparative data than would not have been possible with a single-site case study design (Tran, Hallinger & Truong, 2018). Also, using a multi-site design enabled me to not only identify themes across the four different schools, but critically, to also identify themes that were unique to each specific school context.

There were many considerations I saw as relevant when deciding to adopt a qualitative research methodology to conduct this research project. First, qualitative research uses natural settings as the source of data (Eisner, 1991; Brantlinger et al., 2005). Secondly, the researcher acts as the human instrument of data collection. This resonates with my study, as I was the human instrument when I conducted interviews and lesson observations. Thirdly, qualitative enquiries are descriptive and incorporate the presence of 'voice' in the written text (Eisner, 1991). Fourthly, qualitative research contributes to the field of education by capturing involved people's perspectives and by contributing to an understanding of discourses that shape social life in schools (Brantlinger et al., 2005). Fifthly, qualitative research allows a researcher to provide an in-depth study for the meaning behind participants' perspectives, where the data of the enquiry is often captured as people's words gathered through interviews (Maykut & Morehouse, 1994). Therefore, the choice to use a qualitative design was done intentionally, as I wanted to have a deeper understanding of the perspectives of my participants' lived realities,

rather than to only obtain a wide range of surface level information that I felt a quantitative design would provide. This resonates with what scholars (Maykut & Morehouse, 1994) describe as the outcome of qualitative research where they propose that it is not the generalisation of results that is important. Instead, the focus is on an in-depth understanding of the perspectives of the participants who were a part of the study. What I found to be of value with the qualitative design of the research process was that it allowed for teachers and principals to tell their stories in detail and express to me what they know or felt they did not know and importantly, how they felt about their lived experiences. Finally, Hoepfl (1997) explains how qualitative research processes can have an emergent design as opposed to a predetermined design, which is aligned with the transformative framework that informed my research process. This is significant as a researcher is finding out information as it arises from the research sites during the data collection process, rather than predetermining what might emerge. Also, the voice recording of interviews, the transcription process and the thematic analysis of the archival data constituted a descriptive process (McMillan & Schumacher, 2010).

6.3.1 Data collection

Researching teacher implementation of inclusive teaching practices and factors that constrained or afforded them from implementing said practices, required a holistic approach that captured the dynamic interplay of teachers, the contexts in which they work and their experiences from their pre-service teacher education. Complexity-influenced research designs are shaped by an interest in the interconnectedness and networking among elements within systems allowing for an understanding of the influences that shape the emergences that present as the system transforms. Using a non-linear approach allows for the consideration of a breadth of other influences on what constrains or promotes teachers to teach inclusively rather than what would emerge from a cause-and-effect process. This required forms of research premised on interactive, qualitative accounts that looked at phenomena or systems in different ways to capture multiple effects and multiple perspectives (Cohen et al., 2006; Opfer & Pedder, 2011; Engeström, 2001).

I conducted my research in separate and different primary schools in South Africa to investigate affordances and constraints to inclusive teaching. The four primary schools were purposively selected according to the following criteria: first, they were geographically located in urban settings. Secondly, they represented a spectrum of primary school educational institutions that are found in South Africa, which included: one public school, one well-resourced independent

school, an under-resourced independent school and a public school that is under-resourced. These schools became my units of analysis (Terre Blanche & Durrheim, 1999). Once formal permission to conduct research was granted by the relevant statutory bodies (Department of Education or the school's Governing Body and the University Ethics Committee, see appendix 4), I approached the principals of the schools to gain their explicit permission to conduct ongoing research in his/her school where I would visit each school site eleven times and where I would interact with teachers in one-on-one interviews and observe them teach in their classrooms. To gather data for my study I conducted a formal interview with each school principal and two/three teachers teaching in the Intermediate and Senior Phases (Grades 4-7) and also observed them teaching. Details of this process are described below.

A purposive sample of nine teachers was selected based on each having completed a recognised teaching qualification at a university in South Africa. First and second year teachers were not considered for this study as this is a period for them to 'find their feet' and there is also the danger of them being overburdened by the demands of the research project and their teaching workload (Jones, 2002). Also, experienced teachers who qualified many years ago were not considered suitable candidates. This decision was taken as part of this study investigated what teachers had learnt about inclusive teaching during their university education. For teachers many years out from their pre-service education, inclusive education programmes might not have formed part of their education programme as a result of the former being a relatively new and evolving field.

6.3.1.1 The qualitative data collection methods used in this study

At each of the schools I interviewed two/three purposively selected intermediate phase teachers who volunteered to participate in my research. The first semi-structured interview was an hour long and preceded two classroom lesson observations and follow-up interviews to discuss each lesson. Each interview was with me (the researcher) and one teacher participant only. The interview was conducted at a private location within the school (office or classroom during the teacher's free time during or at the end of the day). The interviews were semi-structured in design. This was specifically so as to allow for full expression by participants of their ideas, viewpoints, contextual realities and opinions, in order to facilitate an inductive analysis process with rich data. The first purpose of the semi-structured interviews was to elicit information about the instructional pedagogical practice teachers engaged in when faced with the challenge of teaching learners with a range of different learning needs. Secondly, the interviews also

elicited information regarding the extent to which the ideas of inclusion had impacted on teachers' own perceptions and understandings of what it means to teach inclusively, and how these have impacted on their instructional practices and the unique contexts in which they work. The semi-structured design of the interviews was important for the research to enable a comparison of responses across participants when conducting the thematic review of the findings. An interview schedule was generated (see appendix 1) which, taking into account contextual variations, was used across all initial teacher interviews. The reasons I chose semi-structured questioning as a data collection method are aligned with what scholars (Onwuegbuzie & Leech 2006) argue when they say that research questions create a framework for conducting a study, assisting the researcher in organising the research and giving it relevance and direction. Predetermined semi-structured research questions also establish the study boundaries and critically give rise to the type of data that is collected while at the same time allowing for discussion and personal opinions to come through in the narrative. Another advantage of this is that the semi-structured research questions also narrow the focus of the study to the questions that a researcher intends to have answered (Creswell 2005). This qualitative design has been influenced by studies conducted by Florian and Black-Hawkins (2011).

When designing my interview schedule, I was determined to ask questions that would yield as much information as possible to address the aims, objectives and the questions asked of this study (Gill, Stewart, Treasure & Chadwick, 2008). Although I created a set of definitive research questions that were focussed on my research objectives, I endeavoured to make them neutral, clear and understandable to the interviewee. I structured my interview schedule such that there were easier questions that were more straightforward at the beginning before moving to more difficult questions. The purpose of this was to build rapport with the participants and to make each feel at ease with the interview process (Gill et al., 2008).

When conducting interviews, there were limitations to the type of qualitative data production methods that I needed to take into consideration. Turner (2010) explains that first, when participants fully express themselves as they answer the interview questions the subsequent coding process can become cumbersome where it then becomes difficult to extract themes (Turner, 2010). Secondly, the way that questions are asked by the researcher and the emphasis placed on certain questions can elicit very different responses from interviewees and this bias or subjectivity can have a negative effect on the reliability of the findings. Also I was aware that no matter how I endeavoured to be objective and systematic in my approach to the

interviews as the researcher I could not escape the fact that the challenges and constraints of everyday life interfere with interpersonal relationships (Cohen, Manion, Morrison, & Morrison, 2007). Finally, there is often no reliable way of determining whether the interviewee is responding accurately or if he/she is trying to impress the researcher or express a subjective opinion rather than fact. This is also linked to that fact that a 'performance' is taking place in the moment of the participant responding to questions or telling a story to the researcher. This means that it was important to consider how participant responses could both mirror and reflect the perceived positionality of the researcher. The semi-structured interview schedule I used contained a list of general topics that I wanted to explore during each interview that were aligned to my research questions. Some researchers see the recording of the interview as essential to gain reliable data (Hoepfl, 1997; Patton, 2002).

After the formal interviews had been conducted, I arranged to observe two lessons on separate occasions. Each lesson observation was followed by subsequent reflective, individual interviews, of sixty minutes in duration. This second-round of semi-structured interviews afforded the teacher the opportunity to reflect on the lesson observed. In these interviews questions pertaining to the challenges they faced in the lesson with regards to inclusive teaching (see appendix 3) were asked. This was planned as an inductive process, where the evidence of inclusive teaching and evidence of the challenges to inclusive teaching emerged from observations and the interview commentary. The two lesson observations took place six months apart from each other. Notes on what was seen were recorded in my journal as corroborating evidence for what I observed in the lessons and discussed in the follow up interviews.

As an objective of this study was to elicit information about how the various components in a school, as a complex activity system, either constrain or promote inclusive teaching, it was necessary to gather evidence from the other components that interact with the subject (teachers) in the system. Therefore, I needed to broaden my data collection strategies to find out how environmental factors (the school or external pressures from the community and the education department) and inter-component factors might constrain or afford teachers from teaching inclusively. To achieve this objective, I invited the principal at each of the purposively selected schools to participate in formal semi-structured interviews. I used an interview schedule (appendix 2) to direct the interview process. Each participant interview was an hour-and-a-half in duration to allow for discussions to evolve and for full expression of ideas and opinions. The interviews took place in a private location at the school, which in all cases, was the principal's office. The interviews were done at the end of the school day to maintain privacy and

confidentiality in accordance with the stipulated ethical research process (appendix 4). Similarly, the interviews with the principals were also semi-structured in design and the interview schedule remained the same across the interviews with the four principals at each school. This was deemed important to allow me to compare responses across participants. However, the semi-structured design of the interview schedules did allow for open-ended conversations that elicited information that was unique to each context. The primary reason to interview the principals was to gather information about their school environment and their feelings and opinions regarding the constraints or affordances to inclusive teaching at their schools, not to undermine or compare the data with the teacher's responses. Furthermore, the principals were positioned to provide information regarding other constraints or affordances that exist in their schools, and which go beyond the classrooms and the teachers and have a resultant impact on teaching and learning. This information included tensions from other activity systems in the society that had a vested interest in the principal's school. This information included details on financial and resource-based constraints that might exist, rules and directives for governance from the department of education or the school's governing body and constraints or affordances to inclusive teaching coming from the wider community or management team.

6.3.1.2 Lesson observations

It is surmised by scholars (Cohen et al., 2007) that conducting classroom lesson observations is an effective method for gathering authentic and rich data, as it allows a researcher to consider the physical setting as well as the interactions between the people in that environment. Thus, lesson observations gave me the opportunity to observe teachers in authentic settings and observe for inclusive teaching which was an objective of the study. It often happens that what teachers say happens in class or when they describe how they responded to a situation differs considerably from what happens in the actual setting or classroom. This is congruent to what scholars (Cohen et al., 2007) argue when they say that classroom observations are unique in that they allow for the collection of authentic data that would not be the case with more inferential methods of data collection that might include only the use of interviews. I was interested in observing teachers teach to find out how they teach in the classroom setting. Scholars (Cerbin & Kopp, 2006) argue that the primary focus of lesson observations is not to find out what learners learn, but rather to find out and observe how they learn in the class. According to scholars (Grimm, Kaufman & Doty, 2014) it is essential that a researcher conducting the teacher observations is clear about the data that is intended for collection before

the lesson intended for observation takes place. Scholars (Grimm, Kaufman & Doty, 2014) refer to methods that a person observing a lesson can use to focus their data collection process. They refer to scripting, where the observer makes descriptive notes on what is observed. These notes include teacher-learner conversations that take place in the social setting, actions taken by the teacher in response to a situation that might arise, notes on various organisational strategies used to convey the activity of the lesson and a record of questions asked of learners.

The lessons observed by myself were typical, timetabled lessons that followed the curriculum and were not specially planned for this study. This was necessary for authenticity and trustworthiness in that the data had to reflect the typical school experience of the learners and the teachers that they encountered on a daily basis. As mentioned, each of the lesson observations was followed by a reflective, semi-structured and open-ended interview that allowed the teachers to describe their instructional practices as they interpreted them. It was important for the teachers to be afforded the opportunity to first, reflect on the intrinsic values and ideas that influenced their decision making processes and secondly, what constrains or enables them from meeting the challenges of teaching learners with a wide range of different learning needs. This included consideration of the pressures from the prescribed curriculum or their unique working context presented to them by the school environment.

The lesson observation process is not without certain challenges that the researcher needs to be aware of to avoid bias. Denscombe (2014) explains how the researcher's perception of the lesson and the context of the setting may be influenced by various elements in the setting which could have a negative effect on the authenticity of the data that being collected. For example, I found that in some of the classes the learners were distracted by my presence and it was difficult to remain unobtrusive. I was concerned that teachers or learners would 'alter their behaviour' from what was considered to be typical. However, the fact that I was familiar to the learners as I had been introduced to them prior to the first lesson observations, I felt that after the initial greetings in the class I was no longer the focus of attention and the lesson continued as it should. Another concern is that a researcher conducting the observation is human and has a natural bias to unconsciously focus on some aspects of the lesson and ignore others. This can affect the authenticity of the data. This concern, highlighted by Denscombe (2014), was the danger of factors related to selective perception or selective memory that can lead the researcher to focus on some information coming in and ignore other information based on his/her own emotional state or past experiences. To mitigate this danger, I compiled a basic observation schedule (see appendix 6) that was followed in my journal as a framework

(Oswald, 2010). This process added some structure to what was recorded during the observation. I also was aware that as I wrote down what was seen there was the danger that as I was writing I might miss out on a component of the lesson.

6.3.2 The general procedure that was adhered to by the researcher on a visit to a research site

The process I describe here is the typical procedure that would take place on visits to the schools to conduct the interviews. These visits were preceded by a meeting with each participant where their consent to participate in the study was received formally in writing and biographical details were noted down in my journal. These biographical details included the number of years they had been teaching, their age, subject speciality, grades taught in the past and those currently being taught at the school, their seniority and other responsibilities in the school, the duration they had taught in the school and the name of the university where they had received their pre-service education.

In all cases the teacher was notified two weeks in advance that I was planning to come to the school for a lesson observation and an interview. The convenience of this arrangement was confirmed by email. I would also notify the principal and the governing body of the school that I would be coming on a certain day and what my intentions were for the visit. Upon arrival I would present myself to the administrative staff who would inform the principal that I had arrived to conduct the research in the school. The teacher that I would be working with on that day would meet me in the school reception area. At this point I would remind the participant that their participation in my project was voluntary and that at no point did they have to change their actions in the lesson on account of my being present. I would then proceed to the classroom with the teacher and take up my position at the back of the class. When the children entered for the lesson, I was greeted by them as I was already known to them as they had all had to provide me with permission and their parental consent to conduct the observation of the lesson with them present (see appendix 5). I would then observe the lesson and take notes in my researcher's journal. I would not actively participate. At the conclusion of the lesson I was usually invited to the staff room to meet other teachers and to check in with the principal. When the teacher had a free hour in the day, or at the end of the day, we proceeded to the private interview room where a one-hour long interview that focussed on the observed lesson would take place. These interviews would be recorded with a handheld recorder. The recordings

would then be transcribed verbatim at a later stage. In all cases the transcriptions were made available to the participants upon request for their perusal.

6.3.3 Coding

Coding has an important role to play in analysing qualitative data. Cohen et al. (2007) explains how the identification of codes from a dataset are a means of data reduction. Codes or categories are words that are often used interchangeably by scholars and are described as labels or tags for allocating units of meaning to the descriptive or inferential information collected through a qualitative study. The codes or categories are attached to varying sized chunks of information which can exist in the form of words, sentences, phrases or in some cases whole paragraphs. This inductive process of code or category finding allows the researcher to notice relevant phenomena from the data, to find commonalities, differences and patterns (Coffey & Atkinson, 1996). The codes or categories that emerge, or that are predetermined before the analysis process starts, can be links between locations in the data and sets of concepts or ideas. Some scholars (Coffey & Atkinson, 1996) consider codes and categories, in a sense, to be heuristic devices which enable a researcher to go beyond the data under scrutiny. Scholars (Miles & Huberman, 1994) further explain categories to be based on various criteria that can include various activities, meanings, behaviours and contextual settings. It was important to take into consideration what scholars (Miles & Huberman, 1994) point to where they mention that the codes that researchers identify need to closely resemble or identify with the original data set to allow each researcher to form a link back to the original data set that was analysed.

There are essentially two contrasting methods that are applied by qualitative researchers as they go about the coding process. The first method, originally suggested by Glazer and Strauss (1967), is recommended for the inductive researcher who may not want to pre-code the data before it has been gathered in order to see how it functions or nests in within the context of the study without the constraining boundaries of a predetermined code set. The second method which is advocated by Miles and Huberman (1994), is where the researcher creates a provisional list or ‘start list’ of codes or categories well before the field work begins. This predetermined list emanates from the initial research questions or the hypothesis (Basit, 2003). I was of the opinion that a predetermined set of codes or categories would first, limit the scope of my data collection, where I could end up missing pertinent information, and secondly it would add unwanted subjectivity to the task where I might inadvertently end up ‘cherry

picking' chunks of information and leaving out other information with the unconscious result of guiding my data to a predetermined conclusion.

The purpose of the analysis process was intended to organise and provide an explanation of the data in relation to the research participants' definition of each of their contextual situations (Cohen, Manion & Morrison 2002). The interview transcriptions were analysed thematically (McMillan & Schumacher 2010), guided by 'sensitising concepts' (Bryman 2012, p. 388) derived from the research question. The first part of the analysis process involved identifying segments of data that were named as codes which were then used as indexing devices to identify similar segments of data from the transcriptions (MacQueen et al., 1998). These codes and categories were then used as labels or tags for attaching units of meaning to descriptive chunks of the descriptive data. These included sentences, phrases, words or even paragraphs from the raw text (Miles et al., 1994). Finally, these categories were collapsed into themes.

Following on from the coding process it was necessary for me to visually arrange the categories and themes. I did this by visually representing the data into tables (see an example in appendix 7) on a Microsoft Word Document which allowed me to highlight sections and identify links and segments of data that would be used in my discussion of the findings. Presenting the findings in the form of a table is referred to by scholars (Punch & Oancea, 2014) who explain that displaying the data allows the researcher to organise and compress the data to aid in analysis. I found that by creating tables to represent the data I was better able to draw conclusions. Once I had arranged the codes, categories and themes into tables for each participant I was able to compare the data between participants and find patterns or comparisons that either confirmed or refuted evidence on an emergent theme. I was also able to compare the three teacher interviews from a particular individual participant, to identify when a category arose frequently across the interviews, or where information contradicted with a data segment from a previous interview.

6.4 Considering the inductive data findings within the predetermined structure of CHAT activity systems models

In this phase of the data analysis process I considered the emergent themes from the thematic data analysis process (Chapter 7) from the perspective of Engeström's (2001) second and third generation activity systems models. During this second process, the data were examined through the lens of the five basic principles of CHAT and the theoretical tools of relational agency and knotworking in order to narrow the focus and gather an understanding of the data set within the framework of CHAT (Engeström, 2014; Engeström, 2001; Edwards, 2007). With each emergent theme I was able to consider the findings in relation to the components of Engeström's (2000a; 2001) activity system triangles and examine the contradictions and tensions that were uncovered.

Using activity system models allows the researcher to analyse human interactions in context and account for the complex and intertwining issues present in the system (Mwanza, 2001). Mwanza (2001) suggested a method for conducting this analysis process. First, identify what the various components of the activity system are, within the system being investigated, and then identify the component that is the central focus of the emergent findings. In the case of my research, it was the teachers as the *subject* component and their experiences of inclusive teaching within their particular contextual reality. For example, the *subject* component would be the teachers while the principals would represent a central part of the *division of labour* component. This would then provide me with a framework to investigate this relationship as an affordance or a constraint to inclusive teaching. Secondly, Mwanza (2001) suggests that the researcher creates an activity system model that represents the complex system being studied. This would entail allocating each component to the activity system.

During the data collection process where participants were interviewed and teachers' lessons were observed, each participant was considered individually. This meant that during the coding process, the subsequent categories and themes were arranged onto separate tables, one for each participant. This meant that I was left with nine tables, one for each teacher who volunteered for the project and an additional four tables for each of the principals from the four schools. At this point I grouped the teachers and their respective principal into their specific school. This meant that as I progressed with the data analysis I examined each teacher individually in terms of their contextual reality of teaching within their unique complex activity system (school). This was done in consideration of how the teachers went about the process of working towards

the shared *object* of their unique environment. What this allowed was further analysis at each site with the principal's input considered as representing the *division of labour* component in the school/activity system.

6.5 Credibility and trustworthiness

Considerations of credibility and trustworthiness are important when considering the criticisms levelled at qualitative studies so typical of inclusive education research (Allan & Slee, 2008). As outlined in the literature review, proponents of special education (Horner et al., 2005) criticise inclusive education research as lacking in statistical evidence, scientific rigour and transferability. In their view most of the qualitative research that relies on interviews is opinion based and subjective, therefore they question the reliability of the findings (Horner et al., 2005).

Taking this into consideration, I firstly employed various strategies to ensure as far as possible that my conclusions resulting from data production and data analysis processes are credible and trustworthy. These included, prolonged engagement at the schools I selected to build trust and rapport with my research participants. Then, describing the settings of the school and the participants and finally, conducting data analyses on an interim basis (McMillan & Schumacher, 2010; Creswell & Miller, 2000). These strategies were important, as I also needed to consider that the generalisability of the research was limited by the scope of the study. This was because of the relatively small number of schools and participants that I engaged with.

Secondly, I considered the English language proficiency of the person interviewed and ensured that my questions were not ambiguous. Finally, I had the participants review the accuracy of the interview transcriptions (Brantlinger et al., 2005) and indicate to me whether what I had transcribed was an accurate representation of what had been said between us. I took the interview transcriptions back to the schools to allow the teachers an opportunity to read them and make comments. I was also constantly aware of interpersonal subjectivity and reflexivity (Hoepfl, 1997). To ensure an awareness of subjectivity and reflexivity I always considered what researchers (Eisner, 1991; Pillow, 2003) refer to as the four validated strategies of reflexivity: first, recognition of myself in terms of personal self-awareness and how my views or opinions could influence participant responses. Secondly, recognition of the 'voice' (Eisner, 1991) of the participants interviewed, i.e. letting them speak for themselves. Thirdly, reflexivity as truth telling, where I constantly strove to be accurate with my data capture and analysis. Finally, I considered the concept of reflexivity as transcendence where I constantly transcended my own subjectivity, bias and cultural context (Pillow, 2003). To ensure reflexivity I

incorporated peer debriefing and the use of a field-log to maintain a record of dates, times, places and people and the use of a personal reflexive journal to trace my personal feelings and opinions throughout the fieldwork period (McMillan & Schumacher, 2010).

Another term that relates to my study is called 'crystallisation.' Crystallisation encourages a researcher to gather multiple data types (interview' transcripts and researcher's journal notes etc.) and employ various methods and numerous frameworks, the intention of which is to open a more complex and in-depth understanding of an issue while remaining impartial (Tracy, 2010). To achieve this my findings included evidence from the teachers and principals who were interviewed and the teachers who had their lessons observed.

The scholar (Tracy, 2010) considers the concept of 'rigor' in qualitative research. Tracy (2010, p. 841) explains how "demonstrations of rigor include the number and length of interviews, the appropriateness and breadth of the interview sample given the goals of the study, the types of questions asked, the level of transcription detail, the practices taken to ensure transcript accuracy, and the resultant number of pages of interview transcripts." These were all taken into consideration as I embarked on the process or working with the research participants in the schools. In order to be a rigorous researcher I provide a detailed description of the process thought which my data was coded and organised. This is in line with Tracy (2010, p. 841), who explains that "rigorous data analysis may be achieved through providing the reader with an explanation about the process by which the raw data are transformed and organized."

The trustworthiness of qualitative data is often presented with words such as credibility, dependability, conformability, transferability and authenticity (Elo et al., 2014). In this section I present an explanation as to how I considered the overall trustworthiness during all the phases of my research process. This included a cognisance of all the associated words listed above. To achieve this goal of trustworthiness in my data production and data analysis processes I utilised a checklist, created by scholars (Elo et al., 2014) that is intended to be used by researchers attempting to improve the trustworthiness of their content analysis study. At each phase of the qualitative research process, namely the preparation phase, organisational phase and the reporting phase, I considered the accepted guidelines below.

Preparation phase (the data collection method): Here I considered how I would collect the most suitable data for my study, what was the best method to answer my chosen research questions adequately, the types of questions I would utilise in my interviews with participants, my own research skills and what methods I would have to establish to pre-test my data production

method. After careful consideration I chose to use semi-structured research questions as a primary source of data. To avoid 'researcher's bias' or me steering my questions towards a certain answer, I enlisted the assistance of a critical-reference group, made up of teachers and academics whom ultimately, are the audience my research is primarily intended for (Payett, 2003).

Another consideration of my preparation phase concerned my sampling strategy. For my study I used a purposive sampling method to select my school sites and the teachers that would participate. To make this decision dependable I had to consider the projected stability of the data over time. Therefore, the reasons for the purposive samples being selected in the first place, according to my research questions, has to be conveyed, and a provision of a rich description of the contexts of the physical sites and the biographical details of the participants was essential so that the transferability of the results to other contexts could be ascertained (Elo et al., 2014). This was achieved by initially obtaining a rich and detailed historical and contemporary account of each separate school and a rich and detailed biography from each teacher and principal participant.

Organisational phase: According to scholars (Graneheim & Lundman, 2004) a researcher needs to be aware that when approaching a set of qualitative data there always exists a certain degree of interpretation when considering the texts or transcriptions. For this reason, scholars (Polit & Beck, 2012) explain that for credibility to exist in a particular research project, there needs to be a level of conformability in the interpretation process, meaning that the researcher accurately represents the information provided by the participants and that the interpretations of the data are neither intentionally nor unintentionally invented by the person conducting the analyses.

Reporting phase: In this part of the research process content analysis is linked to transferability, conformability and credibility where results are considered systematically with careful consideration taken in regards as to how results are reported (Elo et al., 2014). To achieve this, I utilised extracts of text from the coded data in the form of quotations from what participants said. This was done to provide me, as the researcher, with a high level of conformability and objectivity. Conformability and objectivity of my data was achieved because the quotes from the participants accurately represented the information that was provided rather than my own interpretations, that could have unknowingly contained bias or incorrect interpretation of what was reported. Although quotations from as many participants as possible helped me to establish a connection between the findings and the data set, it became apparent that I had to carefully

consider the importance of having a systematic approach rather than one where I 'pick out' of the data sets what I deemed to be important, or that might conform conveniently to a predetermined answer as this would jeopardise the credibility of the study. To do this, I ensured that the quotations I selected were connected to the main concepts and were widely representative of the entire sample or that they were opinions that were frequently reinforced across interview scenarios. Finally, to convey trustworthiness in my findings, it was essential to provide an accurate description of the analysis and the results of the relationship between the findings and the original data (Elo et al., 2014). This was done through the production of the interview data tables that showed the codes and the themes with supporting quotes from the transcriptions or the researcher's journal.

6.6 Ethics

Qualitative research has the potential to be more intrusive than quantitative research. An application to the ethics committee of the University of the Witwatersrand for clearance was made and ethics clearance was granted with protocol number 2015ECE006D (appendix 4). This application included evidence of all the considerations I intended to consider as I proceeded with my study. These included, first, obtaining informed consent from all participants and institutions directly and indirectly affected by my research process. This included written, informed consent from the Department of Education, written permission from the principals of the schools selected as the sites of the study, the participant teachers who volunteered to be interviewed and have their lessons observed and the learners and their parents who were indirect participants in the observed lessons. Secondly, I adhered strictly to all confidentiality and anonymity protocols. This included keeping the names of institutions and participants anonymous and non-identifiable in print and ensuring that all data gathered was stored securely. Thirdly, I negotiated openly and in a forthright manner to ensure that the participants understood the power they have in the research process and that they had a full understanding of the reasons behind my study. Finally, I strove for fairness and integrity when dealing with participants as part of my personal, moral duty as a researcher (McMillan & Schumacher, 2010).

6.6.1 Understanding the power relations in the research process

It is important for me to elaborate on the power relations and ethical considerations that are always omnipresent in the research process where a researcher, such as myself, interacts with participants. I was constantly aware of the uneven power dynamic that existed every time I

interacted with the participants, be it during an interview or a lesson observation. To mitigate the risk of abusing my power in the relationship with the participants I applied the concepts of critical reflection and self-monitoring as a tool to enable me to overcome this ethical dilemma (Brookfield, 2010). This critical reflection outlined by Brookfield (2010) entailed my making clear to the participants what my role in the research would be and how I felt that my role could influence their answers to questions or make them feel uneasy. I also acknowledged the pressure that the participants felt to be a part of the study as participants and the possible inconvenience that the research process might have on them in terms of impact on their working day (Oswald, 2010).

Besides the fact that the participants were always informed that their participation was completely voluntary and that it had no bearing on them whatsoever as professionals, I still felt that there was the possibility that my interaction was interference and a strain on their daily work programme. Also, there was a concern from the outset that some of my questions might elicit emotional responses that would make participants feel uncomfortable or vulnerable. To counteract the dangers of uneven power relations and the possibility of participants being exploited I considered an ethical framework that guided my research.

Scholars (Emanuel, Wendler, Killen & Grady, 2004, p. 930) argue that the consideration of an ethical framework when conducting research exists to minimise the possibility of "exploitation" of the participants. In Emanuel et al. (2004) the authors suggest a framework of eight benchmarks or principles for research. For this study I considered the benchmarks in relation to my interactions with the participants to ensure that my research process was ethical and non-exploitative. Emanuel et al. (2004) argues that their benchmarks for research function in accordance with honesty and the avoidance of fraud and that they should apply to any scientific enquiry. Here I describe how certain of the benchmarks suggested by Emanuel et al. (2004) applied to the ethical considerations of my study.

6.6.2 Collaborative partnerships

Emanuel et al. (2004: p. 932) explain that research is a collaborative partnership that requires mutual respect for the "distinctive values, culture and social practices" of the host community. In this case it was the respect I showed to the values, culture and social practices of the participants who volunteered to be a part of the study and those of the individual and unique school environments where I conducted the research. At all times I was respectful of the fact that I was a guest in the environment of my hosts.

6.6.3 Social value

It is argued by Emanuel et al. (2004, p. 932) that research must consider "social value" as the basis for the study. Research that does not prioritise social value exposes research participants to risk for little reward or for no reason at all. Emanuel et al. (2004) argue that before a research study takes place the researcher must determine who will benefit from the study - is it the local community or is it a wider community? For this study I determined that the wider community would benefit from research that investigated which factors either afford or constrain inclusive teaching in the schools. In retrospect, I also felt that the personal interactions with the participants had the benefit of teachers reflecting on their teaching which would positively influence their teaching.

6.6.4 Scientific validity

It is argued by Emanuel et al. (2004) that for a study to be ethical it must be scientifically valid. If data is not reliable and valid and cannot be interpreted by the said beneficiaries of the study, then the research will have no social value and will then have been for no purpose and would have exposed participants to the risk of harm for no reason. In my study I considered validity by considering the feasibility of the research plan and the social impact that my findings would have as a part of the contribution to the scientific community. It is also proposed by scholars (Emanuel et al., 2004, p. 933) that for research to be valid it must also be feasible, where it considers the social, "political and cultural environment" in which it was conducted.

6.6.5 Fair subject selection

Emanuel et al. (2004) argue that historically there were many instances where vulnerable groups of people were targeted as research subjects. The authors suggest that from an ethical perspective, that when participants are selected for a study that they have an established system of identifying legitimate representatives. Also, during the research process there has to be capacity for collaborative partnerships to be established and for social value to be recognised. Fair subject selection was adhered to in my study as I was working in established schools and received explicit permission from the Education Department, the participants and the school leadership to undertake the research project.

6.6.6 Informed consent

Scholars (Emanuel et al., 2004, p. 930) reiterate the importance of "informed consent" of participation in research. They argue that researchers need to gain consent from participants that is acceptable within the community in which any research takes place.

6.6.7 Respect for recruited participants and study communities

Emanuel et al. (2004) also argue that researchers have further responsibilities to the participants that go beyond informed consent. They explain how the researcher must inform the community if any new information arises that is pertinent to the study. Also, the host community has the right to know the results of research that was conducted at their institution. I adhered to this diligently as I kept in regular contact with each school where I conducted research and was open to describe the results of the data to any of the participants if required. I took this further and returned to each research site to provide a synopsis of the findings.

6.7 Description of the research sites

The selection of research sites for a study is determined by the research questions that the researcher is trying to find answers for. It is for this reason that I purposively chose four separate and different schools to conduct my data collection process. In this study the research questions prompted me to explore the constraints and affordances to inclusive teaching in South African schools. The study would be limited, and of little significance if I only considered one kind of school on offer in the South African education environment, as this would be a misrepresentation of South African schooling when held against the backdrop of South Africa's diverse society. As a result, it was important to conduct research across as broad a range of possible schooling environments available to learners in South Africa. One limitation that I could not overcome was the geographical location of these schools in relation to South Africa. With South Africa being so diverse and geographically vast it would have been a valuable and interesting addition to my data to examine the inner workings of a school in another part of the country, but circumstances limited this. As a result, all the schools "purposively" selected (Teddlie & Yu, 2007, p. 85) were in suburban areas in South Africa. What was fortuitous is that within this densely populated area there was a suitable variety of schools to choose from that closely reflected the broad spectrum of educative circumstances found in South Africa. As a result, I was able to choose schools as research sites that would allow me to elicit findings that I could claim, with some degree of confidence, as reliably representative of the challenges and opportunities facing learners in South African schools at the time of this study. These

selected schools represent a variety of schooling options for children, dependant on multiple circumstances in society – affluent independent; faith-based, pro-poor independent; and state-run schools. The findings were collected at the schools in 2015 and 2016. Data analysis was ongoing as interviews were transcribed the coding and thematic review was continuous.

In the section that follows is a descriptive analysis of the four separate school sites (activity systems) that were purposively chosen for the research project. It was also necessary that I access the schools on a frequent basis to gather evidence, thus I had to consider their locality. The parameters of my research design and the requirements of a naturalistic enquiry demanded that I 'embedded' myself at each site. In each of the research site descriptions explained in this section I intentionally outline the historicity of the school to contextualise contradictions (examined through the lens of CHAT in Chapter Eight) that have contributed to how the school has transformed from the needs and motives that lead to its beginnings to where it is at the time of the study.

As this is a naturalistic endeavour the aim was to capture the way of life for a group of people in a complex system. It was important for me to set the boundaries for the system and in this case this would represent the integral and interacting components of the activity system - in other words the schools investigated. Essentially a naturalistic enquiry, or an activity system analysis, investigates the way of life of a group of people over a period of time that has come together around a central motive to work towards a common purpose. The nature of a naturalistic enquiry is such that the interactions and communications between these people that take place in their daily lives are examined and analysed to elicit findings that reflect their lived experiences (Henning, 2004; Oswald, 2010; Yin, 2013). In this study, I attempt to understand the complexities of the *activity* that teachers engaged in, and the tensions and contradictions they experienced as they worked towards achieving the *object* of their actions. These contradictions exist as a result of their interactions with other components of the activity system that conflict with their own perspectives and motives. This is achieved through recording and examining the reality of the 'lived' experiences and the narratives of their daily lives (Henning, 2004; Oswald 2010). As mentioned previously, from an activity systems perspective outlined by the Engeström (2000a), I considered schools or 'activity systems' where I investigated the activity of teachers as the *subject* components, as they go about shared *activity* within the systems community and interact with the other components towards the outcome of achieving the *object*.

Here I provide a rich description of each of the four schools to paint a picture of each research site. In the detailed description of each activity system (school) I use a narrative that is consistent with CHAT as my chosen theoretical framework. This requires that I consider the historicity of each site within the context of the greater social picture where each school is a thread in a greater tapestry of South African society (Engeström, 2001). Also, as mentioned, to keep in line with my ethical obligations each school has been provided with a suitable pseudonym and its exact location has been kept vague to conceal the identity of the participant school. For each description I provide a table to summarise the information provided.

6.7.1 Riverbend Preparatory School

Table 1: Riverbend Primary School

Riverbend Primary School	
Influencing factors	Explanation of factors
1. Socio-economic factors	• Upper percentile of wealth bracket in South Africa • All parents pay school fees • Located in a wealthy, gated community • Children transported to school by parents in the area • Demanding parent body that is influential in directing the school ethos
2. State/independent school	• Full independent school with no state subsidy • Follows the CAPS curriculum, however the autonomous designation allows for deviation from the curriculum structure
3. Subsidy	• No state subsidy
4. Availability of human resources	• Fully staffed resources centre is available to learners • Teacher to learner ratios are kept down as additional staff are employed as needed • Educational specialists are permanently employed These include psychologists, occupational therapists and learning support specialists
5. Access to physical resources 6. Challenges	• Any physical resource or training resource (courses or materials that include computer software or books) • Large grounds with modern facilities that were designed to be wheelchair friendly • (6) Competition for neighbouring schools that are similar in size and ethos

Riverbend Preparatory/Primary is an elitist, independent school that is an educational choice for the children of the top one percentage of money earners in South Africa. South Africa has

a long history of having a state and independent schooling systems that run in parallel to one another. Riverbend Primary School's annual school fees rank amongst the most expensive in the country. Riverbend Primary is also located in an area that can be considered to be one of the most economically privileged in South Africa. When considering historicity, it is important to examine how the school emerged out of market driven supply-and-demand economic circumstances. The school opened its doors to a fee paying parent community in 1999 and was intentionally established on the basis of consumer market research data that indicated that there were not enough schools in the geographic area that claimed to offer: a teaching and learning environment dedicated to academic rigour (with a proven track record of multiple distinctions per matriculation candidate); an education that proposed to be on the cutting edge of technology and; one that offered a formidable set of sporting and cultural options for the learner in attendance. With this schooling need identified, Riverbend became one of the most sought-after schooling choices in the area, with parents identifying with the abovementioned culture and ethos. From an operational standpoint the school has a population of seven hundred learners with a maximum of twenty-five learners in each class and fifty staff members on the academic faculty. The school has a permanent learning-support-centre staffed with psychologists, speech therapists, occupational therapists and learning support specialists - all on permanent contacts. This was established out of the changing needs of the learning population. Originally the school conducted entrance tests to select children deemed better suited to the rigours of the enhanced academic programme. However, with increasing competition from new schools they have in recent years done away with this process. Although entrance tests have been done away with the school has not changed its approach to teaching that delivers on a competitively motivated academic programme. This has created a secondary contradiction (explained in the data analysis), as now the initial shared object (academic achievement) is in tension with an expanded object requiring an educational approach that is contradictory to what has transpired in the past. This is illustrated in the data. The management team consists of a principal and three deputy principals with heads of departments for each academic subject.

From a CHAT perspective, Riverbend School can be considered to be an activity system that grew out of the demands of other activity systems in the community that shared a common *object* of providing learners with a competitive academic focussed education. This saw the creation of the school as a manifestation of 'quaternary contradictions' that emerged as a result of an expanded *object* (Foot & Groleau, 2011). In other words, the school's existence was the

result of tension in other activity systems in the society that shared an interest in schooling. These contradictions subsequently manifested in the need to set in place the emergence of a new school which foregrounded competitive academic education as the *object of activity* (Engeström, 2000b; 2001). This need then manifested as the motive that informed the ethos of the school.

Riverbend School is a completely private entity that receives no subsidisation from the Department of Education and is affiliated with the Independent Education Board (IEB). However, it is fully accredited at the department of education and received a favourable review from the UMALUSI inspection committee, a Government regulatory body that accredits private schools. As mentioned, Riverbend School is marketed as an academic school that uses its matriculation results to attract a clientele with the assurance that success at Riverbend Primary can prepare children for entrance into university.

Riverbend Primary School subscribes to an ethos that promotes unilateral social and cultural diversity. The school's marketing division actively and aggressively promotes the school as an independent facility where differences of culture, religion and ethnicity are encouraged and celebrated. As a result, the learner population reflects the diversity of the South African cultural and ethnic landscape. For example, there exists no one dominant racial, religious or ethnic group amongst the learner population, and learners, educators and other members of the school community, as part of the school as an activity system, are encouraged through the governance of internal policy requirements to embrace their own unique identity in an environment that strives to be non-discriminatory. However, as inclusive as the school promotes itself to be in regard to cultural diversity, the school is marketed as an institution created for those learners who represent the upper percentile of academic ability, with the proviso that teachers expand on the CAPS curriculum to extend learners by offering what the school management considers to be an enhanced and competitive academic curriculum. One example of this is that less teaching time is allocated on the timetable to teach core subjects, as there are additional academic subjects that are included in the programme, which are seen to be an advantage that other schools do not offer, thus giving learners at Riverbend an academic advantage. The thinking behind this is that the children can grasp concepts quickly and therefore do not need the full time set out in the curriculum for some subjects. The fact that Riverbend Primary is an independent school allows them this flexibility. The school is still mandated to teach all of the CAPS curriculum. However, teachers are not dictated to on how management structures the teaching programme. Also, from an economic vantage point, associated with school fee-

pricing, the school is only accessible to the upper one percent of the population of South Africa and excludes, on this barrier alone, the overwhelming majority of South Africans who might want to consider Riverbend Primary School for their children's schooling. This tension within the system has led to a contradiction between a tradition that excludes learners who are not considered to be academically inclined and the reality of satisfying a demand for more learners in a competitive market which resulted in the school relaxing its entry requirements based on academic screening.

6.7.2 Boulder Primary School

Table 2: Boulder Primary School

Boulder Primary School	
Influencing factors	Explanation of factors
1. Socio-economic factors	• School located in a middle-class suburban area • Learners and families face substantial economic challenges • Families cannot afford to pay school fees • Overcrowding of classrooms and there are more children in the school than the infrastructure can cope with • Societal challenges of risky teenage behaviour • Non-cooperative community • Non-fee-paying population
2. State/independent school	• State school • Follows the CAPS curriculum as directed by state policy with no room for deviation
3. Subsidy	• Fully state subsidised, there is no income from school fees. Some income from fund raising
4. Availability of human resources	• Understaffed for the number of learners who attend the school. For three years the learner numbers have increased but the teacher allocation has decreased • Staff that have left the employment of the school are rarely replaced • Overcrowded classrooms due to reduced teaching faculty • No additional human resource assistance
5. Access to physical resources	• Minimal, no funding set aside in the budget for teaching materials or teacher education courses • Property is dilapidated and in urgent need of maintenance

Table 2 provides an overview of the unique circumstances that frame the context at Boulder Primary School. If I consider Riverbend to be at one end of a hypothetical economic spectrum

in terms of wealth and accessibility, Boulder Primary School would represent the extreme opposite Boulder Primary was started as a farm-school by missionaries in 1942, years before Johannesburg and the surrounding cities of the megalopolis expanded because of rapid urbanisation. Its original reason for existence was out of the necessity to provide an education to farm-workers' children, and later, after 1948, to provide Bantu education under the apartheid Government's parallel education system that discriminated on racial lines. Before the advent of democracy in South Africa and subsequent overhaul of the segregated education system the school was directed by the then Department of Education and training (DET) which was a national regulatory body tasked with overseeing schools for black children It was the most underfunded of all the regulatory bodies overseeing education under the apartheid regime. Today the school exists in an affluent suburb but remains a government/state-controlled school, wholly administered by the Department of Basic Education (DBE) and totally reliant on state funding for staff salaries and functioning costs. The diversity of the learner population remains historically similar and emanates from a sub-community representative of the lowest socioeconomic status. The school also provides education for a large population of learners whose parents have migrated from rural areas to the informal urban settlements of the province. These families have little expendable income and, in most cases, both parents are job seekers. There are also many children who are orphans. Although ethnically diverse the school is made up entirely of black learners and teachers. Due to its locality within a wealthy district the school does benefit from intermittent charity contributions, but by and large, the school must function totally on what it receives in the line of state subsidies. In terms of its facilities and infrastructure the school population far outstrips what exists to support it. There are upward of one thousand learners on the premises and the school was originally constructed to cater to around two hundred learners and staff members in total. Teachers have limited physical and human resources at their disposal to assist their teaching practice. For example, there was no evidence of a computer at the school and no library on the premises and none of the classes had enough desks to accommodate class sizes of upwards of forty-five learners when I conducted my research. Many of the buildings attached to the school do not comply with building regulations and the ablution facilities are basically non-existent. The school also has become a refuge for children with severe learning and physical barriers who have remained at the school simply because there is no other sheltered facility available to them in the community and without this school supporting them, they would be destitute. The challenges of poverty and over-crowding are extremely apparent. Although there is a state subsidy in place

is does not nearly cover the running costs of the school, let alone what is considered to be the luxury of additional teacher training and operational resources.

6.7.3 Southern Ridge Primary School

Table 3: Southern Ridge Primary School

Southern Ridge Primary School	
Influencing factors	Explanation of factors
1. Socio-economic factors	• Socio-economically challenged community that is transported in on buses from less affluent areas in Johannesburg • Most families cannot afford to pay the school fees. Outstanding school fees are paid by church-based charities • Direct community is wealthy but the community children in the feeder area attends other schools • Financial constraints as the subsidy and grants do not cover operational costs
2. State/independent school	• Independent school that receives a state subsidy • Follows the CAPS curriculum in accordance with policy directives • Affiliated to the Catholic church, although its relationship does not dictate policy or restrict access on religious grounds
3. Subsidy	• Private benefactors subsidise some school fees
4. Availability of human resources	• Limited: teacher to learner ratios are challenging • No additional staff are employed • A local psychological services centre offers its services on a limited basis pro bono • Teachers were at 90% capacity teaching time on the timetable. This limits time for staff collaboration in the day
5. Access to physical resources	• No budget allocation for learning support materials • Free courses are attended by staff, however, if there is a cost the school does not have budget for teacher attendance • Learners are transported in on buses from areas of low socio-economic status • Historical reliance on a special needs model of outsourcing of therapeutic support

Table 3 provides a synopsis of the contextual environment of the school. Southern Ridge Primary School was established in 1905 by an order of Catholic nuns. The school operates as a private institution which receives partial state funding as a result of the low socioeconomic

status of much of the community who attend the school. The status of this state subsidy is reviewed annually. The school's most reliable revenue stream comes from the Catholic Church. The school has two mixed streams of learners in every grade with no regularity of class cohort size, with class numbers ranging between thirty and nine learners from Grade 1 to Grade 7. Due to its age, it is located on a large campus in an older and affluent area in an urban setting. This means that the school, although in need of constant maintenance, is a secure and inviting campus to provide education to its learners. Although located in a wealthy part of South Africa the school does not service the local geographic community to any great degree. In fact the majority of the learner population is bussed in from poor communities in outlying areas where people live in informal housing settlements. Despite the state subsidy and the church grants the school suffers from financial constraints, as the school leadership is never fully aware of their financial position, because of many parents not being able to pay school fees on a regular basis. However, despite this, the school does not turn away learners who cannot afford to pay fees.

Although the school is far better resourced than Boulder Primary relatively speaking, with less dire financial challenges, they are similarly confronted with Engeström's (2001) primary contradiction (Foot & Groleau, 2011). This is evident where the existing *object* of the activity system engages in *activity* through actors to provide an education with altruistic intentions but faces the tension between 'exchange value' and 'use value' through the necessity of providing education for financial remuneration in a market-based capitalist society. It was reported by the principal that much of the school's resources for learner support go towards combating social problems that stem from socioeconomically challenged communities, including domestic violence, hunger, children made to perform adult labour, alcoholism and absent parents with grandparent-headed families a common feature. The demographics of the school indicate that over ninety percent of the learner population is black with fewer than ten percent white and coloured learners. Within this community there is extreme diversity of home languages spoken, culture and ethnicity. Although Southern Ridge Primary School was founded on Catholic principles the school's ethos and code of conduct prohibits any form of discrimination against learners who are not Catholic. The teachers are faced with a diverse learner population with a wide range of learning needs emanating from the community discussed here. They also face the additional challenge of a large proportion of learners with special educational needs, emotional barriers resulting from their social circumstances and language barriers in this English medium school.

6.7.4 Park Primary School

Table 4: Park Primary School

Park Primary School	
Influencing factors	Explanation of factors
1. Socio-economic factors	• Feeder school for both a community that is of a low socio-economic status and a financially well-off community • Mixed population with regards to socio-economic status • Ethnically and racially diverse community • Roughly 50% of the parent community pay school fees with the remainder's children receiving free education on account of parents' inability to finance schooling • Many learners with English as a second or third language
2. State/independent school	• State school • Strict adherence to curriculum directives
3.Subsidy	• Partial subsidy for teacher salaries and for maintenance
4. Availability of human resources	• Limited budget for additional staff or specialists Only an allocated quota of teachers receives a salary from the state. Additional teachers are funded from school fees • Physical space has been designed to accommodate wheelchairs • Teachers exceed teaching load capacity, limiting collaboration opportunities
5. Access to physical resources	• State resources are made available at times • Private courses are not budgeted for • No additional funding allocated for teacher materials on request • Large well-maintained sports grounds

Table 4 provides a summarised account of the contextual circumstances that exist at Park Primary School. Park Primary School is a government/state-controlled school located in a middle-class suburban area. Understanding the current contextual reality of the school requires that historicity (Engeström, 2001) is considered as a lens with a focus on the origins of the school, within the context of the political climate through which it emerged. When South Africa became a democracy in the early 1990s after the demise of apartheid this formerly 'white' school, located in a middle-class area, voted amongst its school board members to become what was officially, at the time, called a Model C school. Although this terminology has been

side-lined the school still identifies with this delineation today. Model C schools have been considered by some to be hybrids between state schools and private or independent schools. Model C schools require that parents pay school fees and often enforce payment legally for noncompliance. However, they still receive a state subsidy and teacher appointments are made through state run gazettes and teacher salaries are paid by the state. In the case of Park Primary School, the management tries to engage with families to organise payments that are in line with people's personal financial circumstances. One feature of Model C schools, with Park Primary School being no exception, is that they are administered by a School Governing Body (SGB) that comprises members of the immediate school community. This includes teachers, management and parent representatives. This democratically elected governing body has an executive power over the school and allocates where state subsidy money and school fee money can be spent. Often this money is spent in employing additional teachers and support staff to decrease the teacher to learner ratios, as is the case at Park Primary School. Due to the historical origins of the school which was administered by the Transvaal Education Department (TED) whilst under apartheid governance, it was afforded with generous premises and excellent facilities. The school still retains its original grounds today and has managed through philanthropic monetary contributions, lottery money and a large fee-paying community to upgrade its facilities in line with modern spending trends in education. For example, the school has two fully equipped and up-to-date computer centres with Wi-Fi access, Smart-Board technology in many classes, new busses and modern classroom desks. This is in stark contrast to what I experienced at Boulder Primary School where there was a dire shortage of desks, with the available desks in use for over twenty years and well past their functionality. Park Primary has a learner population of eight hundred children with an average teacher to learner population of 1:32. Had it not been for SGB spending on additional teachers this ratio would be closer to 1:42. In addition, the learners have access to a full range of extramural activities that include sport, cultural and music options.

Since the demise of apartheid, the demographics of the school community have changed considerably. The local community has transformed from being an exclusively white area, under apartheid's Group Areas Act policies, to be a fully integrated community representing a wide range of ethnic and cultural diversity. This cultural and ethnic diversity is reflected in the school in both the learner population and the teaching faculty. Another feature of the school is that it has an aging teacher population that has not been extensively exposed to current teaching ideas (inclusive teaching). This internal tension within the teachers between their familiar and

entrenched teaching methods and new ideas causes contradiction when the teachers (subjects) engage in activity towards an object (inclusive teaching).

***Table 5*: Biographical information about the teachers and principals from each school site**

POSITION	**GENDER**	**GRADE**	**YEARS OF TEACHING EXPERIENCE**
RIVERBEND PRIMARY SCHOOL			
Principal	Male	n/a	35
Brenda	Female	5	4
Theresa	Female	6	9
SOUTHERN RIDGE PRIMARY SCHOOL			
Principal	Male	n/a	30
Sarah	Female	5	7
Helen	Female	5	7
BOULDER PRIMARY SCHOOL			
Principal	Male	n/a	33
Lydia	Female	6	8
Olive	Female	5	8
Philemon	Male	6	9
PARK PRIMARY SCHOOL			
Principal	Male	n/a	42
Vicky	Female	6	7
Charlene	Female	6	8

6.8 Concluding statements

In this chapter I have described the methods of data analysis and the design of this research project. Also provided is a detailed description of each of the schools selected as research site and biographical information regarding the participants who contributed to the findings. It was deemed to be of value to provide a rich description of each school site as the contextual dynamics and the historical background of each school provided a lens through which the data could be interpreted and understood. The next chapter is the data analysis section where I describe the categories and the themes that emerged from the data analysis coding process.

CHAPTER 7

INDUCTIVE DATA ANALYSIS

7.1 INTRODUCTION

It is against the institutional backdrop of the participating schools that the teachers and principals' experiences of their capacity to implement inclusive teaching was analysed. The analysis of the findings revealed several factors that were both intrinsic and extrinsic to the participants that had an impact on inclusive teaching. These environmental and personal factors were revealed in the various themes that emerged from the data analysis process. These influencing factors on the implementation of inclusive teaching ranged from institutional culture and ethos, socio-economic resourcing issues and teacher understandings of what constitutes inclusive teaching to pressures from an externally prescribed curriculum imposed on teachers. In the discussion that follows I identify each emergent theme and provide evidence from the interview and observational data to show how teachers ability to implement inclusive teaching strategies is influenced by contextual and intrinsic factors.

Table 6: Emergent themes

No	EMERGENT THEMES
7.2	Teacher preparedness for inclusive teaching
7.3	The prescribed curriculums impact on inclusive teaching
7.4	Teacher orientation towards inclusive teaching
7.5	Management/leadership support in schools for inclusive teaching

7.2 Teacher preparedness for inclusive teaching

I argue that for many respondents who participated on this study, the thought of inclusive teaching can be a daunting prospect to consider against the backdrop of the challenges of teaching in diverse classrooms, where each is required to meet the challenge of teaching learners with a range of different learning needs. One of the reasons for this feeling of being overwhelmed is that teachers felt underprepared to face the challenge of teaching learners with a wide range of different learning needs in a diverse classroom setting. One reason cited by Walton et al. (2014), and illustrated in the findings of this study, was that the experiences of

pre-service training for inclusive teaching at university was inadequate. The majority of the teacher participants interviewed believed that what they experienced in terms of education for inclusive teaching at university was limited in providing them with the skills or knowledge that could be articulated into inclusive pedagogical practice. What the findings showed was that the teachers were already insecure about their ability to implement inclusive teaching in their environment. This denoted that without support or encouragement, or an obligation to teach inclusively, the teachers were not motivated to institute changes to how they teach in their classroom.

All the teachers referred to their pre-service education for preparing them for inclusive teaching in the semi-structured interviews. The following section discusses these comments in the form of a narrative by considering the sub-categories that were collapsed into this theme.

7.2.1 Time allocation in pre-service education for inclusive teaching

A criticism levelled at pre-service education, by seven of the teachers, was the limited timeframes that were afforded to inclusive education programmes by teacher educators/lecturers' in the university faculties where they completed their pre-service teacher training. For example, Brenda from Riverbend Primary School describes the limited duration of time spent by university lecturers on education modules or programmes for pre-service teachers to prepare for inclusive teaching. She mentions that her pre-service education took about two weeks and the courses focus was on informing students about the different types of difference they would encounter. This is evident when she said:

> *Um not so much at university [training for inclusion]. A very small part would have been just try be aware of your um your learners with very clear diversities, these are the ones you've been informed about or ones that you clearly just know from your assessments, the ones that will need help., That was the module that we did, and then inclusive education came in through there. It was about a two-week sort of course on things.*

It was apparent from this extract that Brenda did not receive any training on instructional practice that could be used for inclusive teaching or any theoretical information to that describe the central ideas of inclusive education.

Charlene from Park Primary commented on the duration and rigour of her inclusive education course at university. She mentioned how she felt it was too basic and issues for discussion were covered too briefly with no work done in detail. This was evident when she said:

> *Very little [lecture time given to the topic of inclusive education] – I'll be honest. It wasn't, it was covered very briefly, basically saying that we need to start catering for learners with different needs, different language barriers etc., but it was very basic.*

Furthermore, Theresa from Southern Ridge Primary reported on the short duration of her inclusive education course at university. She was critical that over a four year long programme only three months were allocated to any education on how to teach learners with difference:

> *No, university we had that three-month course where we actually had to participate and come back and write little assessments and how you actually felt doing it [teaching inclusively], but that was not real, real contact.*

Brenda, Theresa and Charlene describe a limited, fragmented and isolated pre-service teacher-education experience intended to prepare them for the challenges they face in the classroom to teach to learners with a range of different learning needs. Brenda mentioned the limited exposure to the ideas of inclusive education and learner diversity where her inclusive education course was only two weeks in duration which in her opinion was inadequate preparation for the inclusive classroom. Charlene bemoaned the "*brief*" teaching attention allocated to education for inclusive education and how the limited course duration meant that the training was insufficient. In Theresa's opinion the three-month duration of her inclusive education module did not provide sufficient exposure to the experiences of inclusive teaching and was thus inadequate. Theresa also felt that the university assessment procedures to evaluate their competencies to teach inclusively were irrelevant, as their contact with learners with a range of different learning needs was neither a practical nor authentic experience.

The findings showed that limited time was allocated to inclusive education programmes or initiatives over the duration of the participants' pre-service teacher education programmes. This finding led me to conclude that the teacher-training institutions in South Africa where the participants on this study received their pre-service education, did not prioritise inclusive teaching as a focal outcome of their course outcomes. This had the resultant effect of the teachers believing or feeling that their education for inclusive teaching was inadequate to prepare them to meet the challenges of teaching learners with a range of different learning needs, leaving them feeling underprepared for the challenges of inclusive teaching. This is congruent with what scholars (Walton, Nel, Muller & Lebeloane, 2014; Malinen et al., 2013; Engelbrecht, 2013) found from their research where they concluded that pre-service teacher education courses in South African universities were fragmented, limited in duration and disjointed and therefore completely inadequate in preparing educators for the challenges of inclusive teaching.

7.2.2 The content of pre-service teacher education programmes for inclusive teaching

Eight of the nine teachers had similar responses when reflecting on the method of presentation of their pre-service courses for inclusive teaching and the course work content that was worked through/taught by the course presenters/lecturers. A predominant thread running through the interviews was that the inclusive education courses/programme materials were deemed to be too theoretical in design, which resulted in the university courses being perceived by the respondents as having limited applicability in 'real life' teaching situations. This can be seen when Sarah from Southern Ridge School criticised the underlying theoretical design on the courses that were presented at universities:

> *I think it's all quite sort of, you know, highfalutin and theoretical and when you actually come down to practically [teach] how do you deal with it in the classroom it's not great, ja.*

> *Also, it's very easy to say stuff in textbooks that in theory, theoretically you can do, but practically it's a very different situation. So that's what I think makes me a bit disheartened...*

Where the participant commented *"not great"* and "makes me a *"bit disheartened"* provides evidence of a negative perception or feeling towards the impact that pre-service education had on equipping these teachers with the practical, classroom applicable skills necessary to respond to children with a range of different learning needs and the challenge of responding to these differences. Sarah explained that there was a dissonance between what was taught at an academic or theoretical level and what she needed for practical application rendering her experiences ineffective for her role as a teacher. Sarah and the other participants who had similar comments felt that the theoretical orientation of their pre-service teacher training was not suitable to prepare them for the practical challenges they would face when implementing inclusive teaching strategies in real world situations.

This view was supported by Brenda from Riverbend School who criticised the theoretical orientation of her university programme when she commented;

> *We got a very big, fat booklet of theory and it had a lot of different conditions or common conditions I guess you'd call it and just um how to identify these conditions and just very general ways which you could accommodate those conditions in your classroom.*

> *I get a little bit panicked about how I'm going to deal with it, what kind of structures I can put in place. Rather nervous when there are disabilities or any kind of diversities.*

These criticisms of the content and presentation methods of pre-service education courses by Brenda illustrated that she felt underprepared to teach to children with a range of different learning needs as, in her opinion, the theoretical content could not be translated into effective practitionership. This was reflective of the feelings of the other participants. Brenda also highlighted a common theme that emerged from the discussions with the participants, where she described how feelings of under-preparedness manifested into feelings of anxiety. This was evident when she said, "*I get a little bit panicked."*

Charlene from Park Primary explains how she would have been better prepared for inclusive teaching had she had an inclusive education programme at university that focussed on the practical aspects that are only evident in authentic teaching circumstances. This was apparent when she says*:*

> *I just feel if there was a course at university where when they're teaching, when you're doing your, your practical's…where someone could tell you, you know, this is how you do it. Rearrange your classroom like this.*

This extract that reflected most what other participants' said is congruent with what scholars (Engelbrecht, 2013; Oswald, 2006) argue when they conclude from their research that the adherence to theoretically orientated pre-service teacher education for inclusion modules, at the expense of practical experience, constrain teachers from teaching inclusively when they are in the classroom context.

7.2.3 *Issues arising with the suitability of course materials for inclusive teaching presented for pre-service teachers at university*

Seven of the nine teacher respondents alluded to the fact that the content makeup of their pre-service inclusive education courses aligned with the ideas of special education that foregrounded a deficit orientated way of thinking about learners with different learning needs. What became evident in the findings was that the participant's responses in the interviews showed that they themselves were confused between which ideas were associated with inclusive education and which were aligned to special needs education. This was congruent with the literature, where Van Rooyen, Le Grange & Newmark (2002) argue how conflicting discourses between inclusive education and special-needs education teacher training create confusion in the mind of the pre-service educator and impacts negatively on each when faced with the implementation of inclusive education in schools. Slee (2011) argued that there is a need to decouple the ideas of special needs education from those of inclusive education.

This confusion between the ideas of special needs education and inclusive education was evident when teachers made the following comments in their interviews:

> *…inclusive education learning came, and we did a module just on children with special needs…. So, it ranged from things like Asperger's to…just being physically disabled. So, a very broad range of different conditions, some were medical ones, but others were just physical disabilities or mental disabilities. [Brenda: Riverbend]*

> *And I remember that there's a textbook that goes with it that goes a lot into the different elements of inclusive education and maybe what type of things you need to look out for like background, um learning difficulties, physical disabilities that you need to watch out for to make sure that you can teach inclusively and how to take those into account in the classroom. I mean they (university lecturers) mostly just say "Ja, maybe he (child who is not coping in class) should be getting outside support or seeing someone," but I mean it doesn't, you know, what do you do in the classroom? [Sarah: Southern Ridge Primary]*

These excerpts both indicate that Brenda and Sarah received pre-service teacher education for inclusive teaching that was orientated and aligned with a special needs education and a medical or individual model lens of thinking. In both cases the participants were taught about the various categories of internal medical deficit conditions or disabilities they could or would encounter in their future teaching careers. For example, the comment from Brenda, "…*some were medical ones, but others were just physical disabilities or mental disabilities…"* and the comment from Sarah, "…*learning difficulties, physical disabilities that you need to watch out for…"* illustrates this point. Sarah's education for inclusive teaching also left her feeling underprepared for the challenges she was to face, as she felt that she received no practical ideas on how to teach inclusively. In fact, her lecturers advocated removing children who did not cope away in order to receive outside support: "…*should be getting outside support or seeing someone…"* These methods of educating teachers are in opposition to the orientation for inclusive teaching discussed in the literature section (Chapter 3.1), which argues against the reductionist ideas of special needs education and a medical model being associated with the ideas of inclusive education. It is argued that these medical deficit categories become tools of control (Skrtic, 1995; Ballard, 2016; Ashby, 2012; Nind, 2017) that have a propensity to promote bell-curve thinking (Florian, 2015). These findings led me to conclude that if a teacher is to teach inclusively his/her pre-service education needs to equip each with strategies to respond to a range of different learning needs and the challenges of responding to these differences. These findings are congruent with the literature (Tomlinson, 2005; Florian, 2015b; Katz, 2015), where it is argued that teacher education programmes need to provide teachers

with strategies to respond to the challenge of teaching children with a range of different learning needs.

Helen from Southern Ridge Primary commented on the type of instruction for inclusive teaching that she received at university. She criticised the teacher education for inclusive teaching programmes for what she felt were courses that were lacking theoretical information and the depth of knowledge necessary to equip her adequately for inclusive teaching. This was evident when she said: "… *a while back but, um, I do remember them saying that there's a move to get no sort of special education schools anymore, but to have all kids in one class, that's all."* What Helen says points to the 'surface-level' knowledge provided by teacher educators regarding what constitutes inclusive teaching and what methods could be used in the classroom to meet the challenge of teaching to learners with different learning needs. This was evident as Helen had little recollection of any teaching of specific practical or theoretical knowledge or skills. Instead she can only recollect being told to expect changes in the future regarding how learners with difference would be handled in the education system "…*there's a move to get no sort of special education schools anymore…."*

Criticism of ineffective or surface level pre-service training for inclusive teaching was also evident in an interview with Charlene from Park Primary where she commented on what she saw as disingenuous information. She felt that with no desire by her lecturers to first, portray the reality of the experience they would face in the classroom of teaching children with a range of different learning needs, and secondly, no motivation to provide any instructional practices to assist them in the inclusive classroom. "…*At varsity they make it look so easy. You get into your little groups and everything just works. No, it doesn't…"* Therefore, she believes her university education for inclusive teaching was not sufficient or authentic in representing the realities of inclusive teaching. At the extreme end of the spectrum, Lydia from Boulder Primary School commented on how she received no tuition at university on how to teach learners with different learning needs when she said; *"No I didn't…there was nothing separate, they just teach…they said nothing about something for learners who are struggling, they didn't tell us how to do that."* This has had the resultant effect of her feeling underprepared for the challenges of teaching learners with a wide range of different learning needs.

In the literature that was reviewed in Chapter Three, many scholars (Loreman et al., 2010; Walton, 2017; Katz, 2015; Florian, 2015b) explained a range of specific classroom applicable inclusive instructional practices that would be necessary for a teacher to use when teaching

inclusively. There was no evidence from the interviews with the participants that they were exposed to any of these instructional practices mentioned in the literature in their pre-service education. In fact, Lydia received no educative programme on how to teach inclusively at her institution. I argue that based on this, the findings show that as a result of the lack of exposure to practical and applicable classroom practices, in line with the ideas of inclusive teaching at university, the participants were underprepared and resultantly constrained from teaching inclusively as they went about their instructional practice. These findings are borne out in the literature. Scholars (Engelbrecht, 2013; Oswald, 2006) argue that pre-service teacher training that focusses on a deficit-orientated approach to learning difficulties and not the ideas of inclusive education constrains inclusive teaching.

7.3 The prescribed curriculum's impact on inclusive teaching

All the participants commented on the impact that the CAPS curriculum had on their ability to teach inclusively in their specific schools. At all the state schools, an adherence to the prescribed curriculum (CAPS) was compulsory and was monitored by the Department of Education. This provided educators with little room for deviance from the subject content, assessment schedules or stipulated yearly planner. All these externally controlled parameters were monitored by regular inspections by members of the education department. Independent schools had a degree of leeway in structuring the curriculum to their own design.

7.3.1 Teaching CAPS

The interview data from all the participants indicated that the CAPS curriculum was not aligned with the ideas of inclusive teaching. All the participants revealed reasons why, in their opinion, adherence to the CAPS constrained inclusive teaching. These opinions are discussed in this thematic review where I compare my findings to what has emerged from the literature (Chapter 2, p. 3). This narrative provides the reader with evidence of how I concluded that at all the four schools inclusive teaching was constrained by the externally motivated directives associated with the CAPS curriculum.

7.3.2 Time constraints for teaching imposed by the CAPS as a limiting factor for inclusive teaching

Of the nine teacher participants, eight were vocal about how the prescribed directives of the CAPS curriculum negatively impacted on available contact time with their classes to effectively teach inclusively. The participants are critical of the CAPS curriculum and argue

that this prescribed curriculum does not consider the challenges of designing strategies for children with a range of different learning needs. Charlene and Brenda make this argument against the time constraints imposed by the CAPS when they said:

> *The CAPS document does not give me the time to revise, so I am going to be a week behind (in teaching) again, I'm constantly playing catch up. [Charlene]*

> *It (CAPS) doesn't give you as much time as I think it would take or the kind of methods that I like to um incorporate for diversity, it doesn't give me as much time as I would like. [Brenda]*

These extracts show that teachers are concerned about the time allocated teaching pace that the CAPS expects them to adhere to. They criticise the limited time made available for revision and reinforcement of curriculum imposed subject matter and the time to utilise a variety of different instructional practices, which is a fundamental element of inclusive teaching. Brenda feels that the pace at which she is expected to work creates a contradiction between her desire to use various inclusive methods "*…methods that I like to um incorporate for diversity…"* and finish what she is instructed to work through with her class. Charlene also feels that the time constraints are difficult to keep to when she says *"…I am constantly playing catch up…"* The findings showed that externally imposed time constraints that orchestrate when and at what pace teachers must teach, directly affects their inclusive teaching at a grassroots level. External directives from the education department that dictate how and when the curriculum is to be taught are generic and cannot necessarily work in all contexts, where unique events create tensions that affect lesson delivery. The findings show that this classroom-based problem created by externally directed teaching-pace-planners aligns with what scholars (Nel, Tlale, Engelbrecht & Nel, 2016) argue where they conclude that the CAPS curriculum has a negative impact on teaching and learning and ultimately constrains inclusive teaching at a micro-level.

7.3.3 Constraints to inclusive teaching related to CAPS directed subject content and externally imposed assessment tools

Eight of the nine participant teachers voiced their concerns regarding the suitability of the curriculum content of CAPS and the assessment tools/methods made available for compulsory compliance. These extracts describe the teacher's frustrations with CAPS prescribed subject content. The teachers are also critical of the quantity of compulsory subject material that requires completion in a limited timeframe imposed by school planners:

> *I think they make it difficult to be inclusive in terms of how fast you have to move with the, you know, how much content you have to pack in, and also how specific they [CAPS] are with things like assessments where it doesn't really make accommodation for the fact you might have to orally test a learner. [Lydia, Boulder Primary]*

> *It's a little bit hard because they give you a specific topic for a specific time. Let's say this is second term, its [CAPS] giving a specific time for those lessons. And if you don't reach that and then at the end of the day you are supposed to assess with everything, yet they forget that we have learners who are struggling, it is difficult, very hard, they don't cater for them, but they say we must cater for them but they don't. [Helen, Southern Ridge Primary]*

Helen levels criticism at the externally prescribed assessment tools that she must use to assess learners' abilities where, in her opinion, they constrain her ability to teach inclusively as they do not accommodate every learner's learning needs: "…*yet they forget that we have learners who are struggling, it is difficult, very hard, they don't cater for them…"* Helen and Lydia both felt that there was no consideration of the range of different learning needs of the child for whom the externally prescribed assessment tools (summative tests) were intended. Helen refers to the amount of topic-based content that requires completion in a given timeframe and how this constrains her ability to teach inclusively. Lydia was specific in her criticism when she referred to a child was not able to physically write a test but because of CAPS directives had to do so "…*doesn't really make accommodation for the fact you might have to orally test a learner*…" These concerns regarding the external assessment materials are congruent with scholars (Graham et al., 2018) who argue that external conditions of assessment allow for barriers to be 'thrown up' that limit some children from demonstrating their full potential in the assessment process.

This issue of an unacceptably large volume of subject-based content in the curriculum that does not assimilate to her particular teaching context was expressed by Vicky from Park Primary when she said: *"There is too much content in the CAPS curriculum. The English CAPS curriculum is so challenging for them, it's a huge jump for them."* Here Vicky criticises the volume of content that she must work through with her learners and she also comments on the challenging levels of the work and how she feels that it is a 'big jump' for her children to cope with. The findings indicate that the participants believe that the curriculum focusses on content and assessment and does not take into consideration the challenge of meeting the range of different learning needs of learners. This implies a 'disconnect' between the content focussed curriculum and the learners who have to work through its framework and demands. The

volumes of content that teachers are required to get through in the year leads to another problem that constrains children's abilities to learn. Brenda says:

> *I find that there is a lot of content to get through. And I find that a lot of the time it is just left to them to read and catch up with by themselves. That's when the children with more diverse will, with diversities, struggle more. So I do feel pressured because I like to take them through all the content.*

Here Brenda explains how the pressure of working through high volumes of content in her designated teaching time means that there are certain aspects that she does not teach and instead, tells learners to read the work on their own without support. Brenda also refers to how children with diverse learning needs struggle more in the learning environment. Vygotsky (1978) refers to the mediated learning experience where, through the process of mediation between a teacher and a learner, the learner can operate in the zone of proximal development which is the optimal space for learning to take place. From the findings it was found that when large parts of the curriculum are not actively taught as a result of too much content and time constraints this negatively impacts on teaching and learning. This negative impact on learning can be amplified for a child with different learning needs. These findings are also congruent with the arguments of Collins, Harkin and Nind (2002) who advocate for a way of thinking where there is a need for a focus on how children and the curriculum interact in an ongoing moment-by-moment process. I argue this cannot happen when aspects of curriculum content are not formally taught and learners are left to their own devices to catch up work exercises they failed to finish, or where they find themselves in a situation where they have to work through the prescribed curriculum content without adequate teacher support.

The teachers reflected on the content-based intensity of the curriculum and how this intensity does not consider the different learning needs of individual learners with a range of different learning needs. This is evident when Theresa said: *"It's an intense programme. The minute you start working with a kid with a severe problem you actually have to have a proper worked out programme for that specific kid's needs."* Theresa voices concern that there are no alternative planning strategies or materials provided in the prescribed curriculum to meet the challenge presented by children with a range of different learning needs and that she has to develop this. She explains how it is then the teachers' challenge to work out specific learning programmes for children in certain circumstances but that the curriculum is so *"intense"* that it makes this difficult and therefore not conducive to inclusive teaching.

Olive shows her frustrations with what she sees as the unfairness of being expected to comply with the externally prescribed assessments of the CAPS and how these negatively affect her learners. *"So, we have to assess them (assess learners with prescribed assessments) and it's not fair because they can't write."* Olive's criticism is levelled at the fact that there are no alternative assessment materials provided for in the CAPS curriculum that consider children with range of different learning needs. These findings are congruent with what scholars Healy and Powell (2012) conclude where they argue that when a curriculum is externally prescribed learners may experience a disjuncture with the content or directives of the curriculum. The findings also support the conclusions of Maher & Seach (2016) who argue that an externally prescribed curriculum interferes with inclusive teaching as it does not consider the individual needs of diverse learners.

7.3.4 Curriculum support and administration processes from a macro-level to a grassroots level

Another concern raised by participants was the lack of information from the CAPS curriculum designers regarding how topics are to be taught and administered by teachers. Also of concern for educators were where the prevalence of administrative errors in assessment materials (summative examinations and project instructions for portfolio activities) that were provided by the curriculum administrators. In particular, these errors were where test questions in external papers did not reflect the syllabus work that was covered by the teacher in class. What came up frequently in the participant' interviews were criticisms of the support structures at a Department of Basic Education level (DBE) to assist with curriculum delivery. This was raised by Sarah when she commented on the lack of teaching guidelines or documentation provided by the department that explain how to teach a section of content based work: *"Well, I mean the curriculum doesn't really tell you much about how you teach it, it just says, you know, you've gotta do parts of speech."* This frustration, shown by Sarah. points to a lack of clear direction or information on how to administer activities in the curriculum. This finding was expressed by the majority of the participants who indicated that there should be some guidance for teachers on what type of teaching strategies would be useful to assist the teacher to meet the challenge of teaching to children with range of different learning needs.

The participants also commented on the administrative errors that existed in the prescribed materials, further compromising their ability to teach inclusively. There were cases where externally derived tests or examinations that are provided to the school, and that are

compulsory, did not match up or align with what the curriculum directed teachers to teach. This was evident when Vicky said:

> *You know I personally was not in favour of that paper [test]. If you looked at the last question on the graph nowhere in the CAPS curriculum are we supposed to teach a line graph in term one and two. And it was there. So, who is the person that is moderating the person that checks the CAPS document that is in class that's working with the learners? Who sets the exam?*

Vicky describes her frustrations at the circumstances where she is directed by the CAPS administrators to administer a prescribed examination to her class that covers a specific aspect of the curriculum (line graph in mathematics) that she has not been directed to teach. This administrative error left Vicky feeling frustrated with the administrators who set curriculum materials and the accompanying assessment materials. Vicky feels that there is a lack of effective moderation of the teaching materials and assessment materials at Department level (DoE). This criticism of the administrative errors made by curriculum designers was expressed by the majority of the participants and only exasperated the negative attitudes that teachers had towards the CAPS.

Teachers felt that there was a gap between what curriculum planners think is the reality of teaching and the actual reality of teaching in a diverse classroom environment. The participants felt that the CAPS curriculum did not recognise the different learning needs of individual children at a grassroots level in the classroom. This was evident when Sarah from Southern Ridge mentioned: *"Ideology of CAPS and practical application are very far apart…because what the government prescribes doesn't do much or at least doesn't communicate with the teachers in terms of what you can do to help kids."* In this extract Sarah shows her frustration at what she perceives as discrepancies between curriculum directives and the practical application of these directives in the classroom, where learners with different learning needs require support. The findings in this section align with the research of scholars (Engelbrecht, Nel, Smit & Van Deventer, 2016, p. 532) who argue that there is "a clear and substantial gap between the idealistic conceptualisation of inclusive education in South African policy documents and its implementation." The findings are also congruent with what scholars (Geldenhuys & Wevers, 2013; Nel, Tlale, Engelbrecht & Nel, 2016) argue, where they conclude that the uptake of inclusive education in South African schools is said to be limited by a stringent curriculum that focuses on subject content, inflexible time frames, reliance on external assessment and prescriptive design. The research findings and the conclusion reached by Geldenhuys et al. (2016) are reflected in the international literature. Greenstein (2013)

criticises externally created and imposed curricula and argues that learning be contextualised and relational to the experiences of the learners. Greenstein (2013) further explained how knowledge should be created through a dialogue between individual learners, rather than learners adapting to an externally prescribed curriculum that does not consider contextual factors or individual diversity. My findings support the scholarly literature (Geldenhuys et al., 2016; Maher & Seach, 2016; Collins, Harkin & Nind 2002; Greenstein, 2013; Healy & Powell, 2012) where it is argued that inclusive teaching is constrained in classrooms by prescriptive curricula that are rigid and content bound.

7.4 Teacher orientation to inclusive teaching

The theme of teacher orientation and understanding what it means to teach children with a range of different learning needs emerged from responses during the interviews with the participants or was demonstrated to me when I observed lessons. The boundaries of this theme included the categorises of first, how participants interpreted and ultimately understood what inclusive teaching was. Secondly, how their internal disposition towards teaching children with a range of different learning needs informed their actions and responses in the classroom. Finally, the theme described the teachers' emergent feelings or attitudes towards inclusive teaching, either from the influence of internally directed intrinsic factors, or those extrinsic factors associated with the environment. The findings revealed an overall positive feeling or orientation towards the ideas of inclusive teaching. As the findings will illustrate here the result of these positive sentiments was that teachers were intrinsically motivated to include all learners in the lesson regardless of the class dynamic and learner diversity they were faced with. Despite this willingness to be an inclusive educator many of the participants coupled the ideas of inclusive education with a special need's framework (Slee, 2011) and could not differentiate between the two. Instead, they regarded them as one in the same.

Also discussed in this section are instances where teachers demonstrated actions when teaching or described instances in the interviews where they taught inclusively. These instances of inclusive teaching were aligned to the description of what inclusive teaching is as discussed in Chapter Three. A sub-category of this theme explored the findings where the teachers discussed the various intentional methods they used in their daily lives as teachers to gain information and support to allow them to teach inclusively.

The majority of the teacher' participants commented on the values and principles of teaching to all learners rather than to most learners at the expense of some. The teachers spoke about

how trying to cater to the different learning needs of every individual child in the class was at the heart of how they perceived their role in the profession as educators.

7.4.1 A positive orientation to inclusive teaching

A positive attitude towards inclusive teaching was elicited from eight of the nine teacher participants and all the four school principals who participated in this project. This is illustrated by the principal of Boulder Primary School where he said, "… *In fact, I would love [inclusion] to happen, holistically at a large scale and then that would excite me …"* This comment reflects the principal's positive attitude towards inclusive education and how he would like to see inclusive teaching happening systemically in his school environment. It is clear from this excerpt that he would like to see inclusive teaching as a systemic element adopted in many facets of his school.

Most teachers from this study explained how they had made a conscious and concerted effort to ensure that every learner's range of needs was first, included in the lesson process, where their different learning needs were all considered; secondly, the teachers took into account the fairness of the teaching process to ensure that access to lessons was equal for all learners; thirdly, the teachers considered the feelings or emotions of all the children in terms of their personal experience of the lesson. This was done to limit their feelings of alienation. Finally, teachers were found to attempt to be empathetic and consider the perceptions of the environment in which children live from the child's own perspective. This was illustrated by Brenda from Riverbend Primary who commented:

> *It's just to try and help that person as much as you can whilst at the same time making them feel like they are just part of a normal classroom environment. Not to make them feel differentiated. And I think that goes across everything. It's like when you're doing an assessment, um thinking about things that will make that assessment easier for them and their certain diversity whilst at the same time just trying to make them feel as included as possible and not like "I have a disability so I need to go to a different school or be in a different classroom or um have a different set of expectations um in terms of, you know, the education side."*

In Brenda's opinion, she feels a personal commitment to include each learner in the lesson activities that form part of her lesson. This can be seen where she intimates how she believes it is her personal responsibility to include every learner into the lesson, while at the same time to protect his/her human right to feeling fully included and not merely integrated into a mainstream class: "*It's just to try and help that person as much as you can."* It is also clear from this extract that Brenda feels strongly that every child has a right to be fully included in

the school they find themselves in rather than be sent to a different school because they have a different learning need that cannot be accommodated. Where Brenda speaks of trying to make the children feel as included as possible she shows that she is aware of how the child might interpret his/her own experience of being a member of the class.

Similarly, the idea that teachers must take the initiative to initiate inclusive teaching was taken to heart by Philemon from Boulder Primary School when he said:

> *So it means that I have to take the time to look at the skills that each individual child is having or their abilities. Then from there I develop the child so that they can be able to know something. I am able to assist these kids, all of them, so that they can be something in life.*

This comment shows that Philemon is prepared to embrace the challenge and take the initiative to teach to learners with a range of different learning needs. Where he refers to "*all of them"* it is evident that Philemon sees that there is potential for every child to learn and to realise his/her potential. I interpreted from this comment that Philemon had a way of thinking, or an attitude, that rejects bell-curve teaching, in favour of seeing potential for change or transformation in every child he teaches. This finding reflects the research findings of Hart et al. (2007) who explain how the inclusive teacher needs to have a 'transformability mind-set' instead of a 'fixed mind-set' towards children and their potential to learn. This positive attitude to inclusive teaching shown in this comment by Philemon was reflected by the majority of the other teachers on the study. Like Philemon, the teacher participants see their role as educators as transformational or as a 'calling' where they are able to make a fundamental and positive difference to the learning process of children. In other words, they believe that they are making a positive impact in the lives of children that goes beyond the scope of teaching as just a job. Both Philemon and Brenda's interview extracts were similar to that of the majority of the teacher participants and showed that the teachers had an orientation to care for each learner, regardless of his/her different learning needs, rather than just teach the content of the curriculum that they were expected to work through in the year.

These findings are congruent with what scholars (Shulman, 2004; Rouse, 2008; Boyle et al., 2011) found where they argue that 'heart issues' define the ethical and moral dimensions and the attitudes and beliefs that are needed for a person's profession. Furthermore, scholars (Anderson & Boyle, 2015; Dixon & Verenikina, 2007) explain that inclusive teaching is an experience where both learners and teachers increase their tolerance, understanding, the value of difference and the rights of everyone to participate in a just and fair education community.

Most of the respondents where conscious of issues beyond their classroom as being significant factors in determining the success of inclusive teaching. Teachers commented on how inclusive teaching must be a whole-school initiative to effect systemic change, rather than actions being limited to their own personal efforts. Brenda commented on the idea that in order to be effective at inclusive teaching the teacher must go beyond the activities in the classroom and must also consider other spheres in the life of a child that affect their schooling: *"and you have to take a look at all the different spheres of their schooling experience to make sure that they are included, it's about not making them (children) feel different to everyone else."* What Brenda is explaining is that the achievement of inclusive teaching goes beyond the classroom and extends into all spheres of the schooling experience. These findings, that reflect the feelings of the majority of the participants, are congruent to what Walton (2011) argued when she concluded that an inclusive school needs to be continuously adapting to the needs of learners who enrol in the school.

A teacher that uses inclusive teaching instructional practices recognises that the learning environment in which learners find themselves must change or adapt to meet their needs, rather than the child fitting in to a rigid structure. This perspective of thinking calls for the teacher to first, endeavour to understand the complexities and multiplicities of diversity within their specific context of the lesson and secondly, recognise how institutional hierarchies and oppression are socially constructed and maintained (UNESCO, 2005). This way of thinking is demonstrated when teachers are seen to value the individual strengths of diverse learners, where diversity is recognised as a strength and a resource for teaching (UNESCO, 2005).

Most of the teachers had an understanding that learner difference can be socially constructed. This was apparent from Charlene at Park Primary who recognises that socio-economic challenges play a significant role in affecting the ability of children to learn in her class:

> *So, some of them are on a bus by half past five or six o'clock in the morning unfortunately, so by the time that they get here um either they're hungry or they are tired already, so I need to keep them awake and interested as well. We also have some learners with emotional baggage, I've quite a few of them. So, I always need to be aware of all right, you didn't have a good day today um… there was an incident last night at home. So those things I need to constantly be, be aware of. And what is nice in term three though I know them well enough, I can look at their faces and know not a good day for you.*

Charlene recognises that due to socio-economic circumstances many of her learners come to school without having eaten a meal and have had to get up earlier than others and travel on public transport. She recognises that this has an impact on a child's ability to learn and presents

as a different learning need that needs her attention. Consideration of the challenge of teaching to a range of different learning needs shown by Charlene in this extract is congruent with the research of scholars (Shulman, 2004; Rouse, 2008) who refer to 'heart issues' where teachers recognise the attitudinal and moral dimensions associated with their profession. Furthermore, it was pointed out by Nel, Tlale, Engelbrecht and Nel (2016) that socio-economic issues which include transport constraints for learners, have a negative impact on their ability to access education and on the ability of the teachers to teach them.

Many teacher participants attempt to create a classroom atmosphere for teaching and learning that promotes tolerance and recognises the range of different learning needs of children with the intention of making all feel included. Sarah from Southern Ridge comments: "*So, ... I suppose the ideals that we've set up at the classroom from the beginning of the year is that no matter who you are…you accept the other person because we're all here to learn."*

Based on these excerpts, I argue that most of the teachers were aligned to an orientation to teaching that foregrounded the potential for learning for all children. This finding aligns with what Osman and Hornsby (2018, p. 398) conclude from their study where they describe how an element of teaching and learning from a social justice perspective needs to consider how teachers ensure that learners "feel safe and welcome" within an institutional setting. Although the teachers were committed to teach to a wide range of learners with different learning needs, they often felt that the challenges to meeting this outcome were insurmountable, where these constraints affected their self-esteem and attitude. This is explored in the next section.

7.4.2 Inclusive teaching as a virtuous idea but a challenge to achieve

All the participants were in favour of promoting the rights of every learner to a fair and equitable education. This mind-set of the teachers was in accordance with the Salamanca Statement and Framework for Action (UNESCO, 1994) that reaffirms every child's right to an education, regardless of a person's intellectual, physical, emotional or linguistic differences. However, despite being in favour of promoting the rights to equitable education for all children, the majority of the research participants indicated that they had feelings of personal trepidation and anxiety towards how exactly they could teach for all learners. The teachers had doubts as to whether they would be successful at inclusive teaching as many felt that he/she would fail the learners in some way. The teachers felt that the challenge of promoting all children's rights to an equitable education made their teaching experience more difficult, complex and emotionally stressful. What came across from the participants in the interviews was concern

for learners faced with a range of different learning needs and their opportunities to be afforded an equitable and accessible education as they progress through the schooling system. This was evident from the following interview excerpts:

For example, Olive from Boulder Primary's reflects her on concern for all the learners she teaches and how she feels overwhelmed and useless at being able to be of any benefit to the children in her care when she comments; "*Most of the time I go home I'm so tired. Always I pray for God to give me wisdom and strategies and stuff to help them. I feel so useless like I am not doing enough."* Olive feels that she is failing to do enough to help her learners in class to learn effectively and this has had a negative impact on her self-belief. This emotional toll is also affecting her health and ability to function effectively when she explains how tired she gets from her teaching experiences. Similarly, Brenda from Riverbend Primary stresses how her attempts to come up with teaching strategies designed to help all learners access the lessons has made her anxious and nervous. This has caused her to question her own abilities to respond in the moment to a classroom situation where there are learners with different learning needs: *"I'm not very good at thinking about what to do on the spot and get nervous when there are disabilities [in the classroom]."* Also, Philemon from Boulder Primary School describes being challenged by the task of inclusive teaching and feeling a sense of emotional pain and frustration when presented with the challenges associated with teaching children with range of different learning needs and responding to these differences. Interestingly, Philemon was of the opinion that it was challenging to teach all the learners with different learning needs but that this did not deter him from taking responsibility for the role of meeting the challenge of teaching to these learners. In the same comment Philemon explains that he has an intrinsic belief that all people are different, and all have a right to be different and to be afforded an education:

> *You see it is very, very painful when you meet these kinds of kids, but the most important thing that I do understand is that all of us we are different, we are not the same. … It is not an easy thing (inclusion), it is very challenging.*

Similarly, Lydia from Boulder Primary describes how she felt inclusive teaching was hard to implement or difficult to actualise in class. But she felt personally obligated to find workable solutions to meet the challenge of teaching to a diverse range of different learning needs for the sake of the future development of the children she teaches: "*Inclusive teaching it's a bit, it's a little bit hard. I don't know whether it's going to work or not, but at the end of the day we have to make it work."* It was evident from these excerpts that the teachers felt a range of

negative emotions associated with their ability to deliver on their willingness to teach inclusively. These emotions ranged from fear, anxiety, sadness and feelings of being challenged to feelings of inadequacy and exhaustion. However, the majority of the teachers demonstrated an attitude of perseverance and dedication for the sake of the learners, in the face of what seems an insurmountable challenges. I argue that this is an attribute or an orientation necessary for a teacher to teach inclusively. This finding is reflected in the literature. For example, Rouse (2008) comments on the necessity of matters of the 'heart' as fundamental to what it means to be an inclusive teacher.

A strongly felt belief of most of the teacher participants was how they looked upon inclusive teaching as their obligation or duty and associated their identity as an inclusive educator with their 'calling' to be a teacher. Charlene captures this sentiment where she expressed her intrinsic motivation to be a ''really good teacher' when she said:

> *I'm not saying I'm an excellent teacher - but I was motivated to be a really good teacher and to make a difference because I've had some really good teachers. I've had some excellent teachers who've changed my life and my motto is always if I can touch one of them, if I can change one of their lives that's fine with me.*

Charlene, like many of the participants, speaks of how she sees her role as a teacher as going beyond being merely a job where she teaches a curriculum. For her, she sees teaching as a 'calling' or duty, where she intends to make an impact through her instructional practice, where she has a 'motto' or intrinsic motivation to touch learners' lives for the good and make an indelible impact on their education regardless of the differences the learners presented to her or the environmental challenges they face. What is interesting is how, despite the challenges she faced when teaching to learners with a range of different learning needs, she retains a positive attitude where she is determined to meet this challenge of being an inclusive teacher.

The teacher participants had predominantly positive sentiments towards the issue of teaching children with a range of different learning needs and meeting the challenge of responding to these differences. This was despite the teachers being very aware of the substantive emotional, physical and occupational challenges associated with teaching to a range of different learning needs in their classroom settings. This contradicted with some of the literature, as many scholars (Ekins, Savolainen & Engelbrecht, 2016; Engelbrecht, Oswald, Swart, Kitching & Eloff, 2005) concluded that many teachers have an overall negative attitude or disposition towards inclusive education and the practices of inclusive teaching. However, it is important to contextualise this by mentioning that the scholars (Ekins, Savolainen & Engelbrecht, 2016;

Engelbrecht, Oswald, Swart, Kitching & Eloff, 2005) also concluded that environmental factors caused occupational stress and emotional hardship that negatively impacted on teachers' beliefs in their abilities to respond to the challenges of teaching learners with a range of different learning needs that is associated with that of inclusive teaching. My findings are congruent with what Engelbrecht, Swart and Eloff (2006) argue, where they highlight that where teachers feel professionally empowered and supported in their teaching environments, they displayed a more positive disposition towards the challenges of inclusive teaching.

7.4.3 Normalcy thinking towards learner difference in line with the medical model

In the previous section, the findings showed that the majority of the teachers had an orientation towards inclusive teaching that saw them take up the challenges associated with teaching to learners with a wide range of different learning needs. What also emerged was that the teachers, although committed to inclusive teaching, felt that it was challenging and was a struggle that went beyond that of a regular job. However, when it came to providing an account of the teaching methods they applied in their classes to teach to learners with a range of different learning needs many of the teachers described teaching practices orientated to an individual model or the medical model way of thinking. The findings show that despite the teachers' best intentions, and emotional commitment to provide an accessible education of every child, and a desire to teach in a way where all the learners can be reached, the teachers' ideas about learner support were often found to be influenced by the ideas of special needs education thinking and the medical model. This had the resultant effect of teachers focussing on medical labels.

From the findings it was evident that teachers had their own ideas of what constitutes the 'normal child' while each made an effort to support the 'other child' or children whom they viewed, as in some way, internally deficient and in need of their help. This often led to feelings of pity towards the children that they classified as the 'others.' These findings which are discussed in this section are congruent with what Florian (2015b) calls a bell-curve approach to thinking about teaching, where most of the learners are accommodated in a mainstream environment with different support offered to others by teachers who do not fit with the benchmarked standards of the lessons taught.

Teachers had divergent understandings of how they respond or should respond to the challenge of teaching children with different learning needs and how to meet the challenge of accommodating these differences. Seven of the nine teachers alluded to the idea of differentiating between the 'normal' and the 'other' child who did not fit or cope with the work

they were teaching. For example, when Brenda was asked how she goes about including children who were struggling in her class she spoke of the support she received at the school to learn about specific disabilities that she encountered. This was illustrated when she said*: "There's definitely the options if ever I had a particular area that I wanted to learn more about, let's say it was ADD or a child with Asperger's or something, um management are very, very willing and open."* Brenda alludes to the fact that in her way of thinking about learner difference there exists categories of disability, internal to some learners, making them different to the rest of the learners in the class. Brenda is of the opinion, that in order to teach some learners with certain internal problems, "*Asperger's or something"* she would require specialised teaching skills that she does not possess. She does however, believe that her school's management team would facilitate this training. Even though Brenda shows a willingness to include or support all learners and is even prepared to go on courses to learn how to accommodate them in lessons, her ideas of how to teach to all children are framed by special needs' thinking and the ideas of the medical model about learner difference. I argue that this confusion or lack of understanding around what exactly inclusive teaching is can be a constraint to inclusive teaching.

The idea that teachers lack certain skills to teach to a wide range of different learning needs and, that in turn, they require some type of specialist training was mentioned by the Principal of Riverbend Primary School when he said: *"…as for where the teachers are concerned, obviously specialised training is necessary to cater to children with needs that might be outside of the norm."* In this extract the principal shows that his thinking is orientated to bell-curve thinking where specialised skills are seen to be needed to effectively teach children who do not fit within the norm. The principal explains a scenario of a child that does not fit the "*norm"* in the classroom and how this child would require the teacher to have specialised skills to be able to teach him or her. This shows that the principal has a medical or individual model orientated way of thinking about disability. There were further examples from the interviews where respondents intimated that they had an orientation towards special needs' thinking or a medical model when teaching to learners with different learning needs. This is evident in the following extracts where teacher respondents comment on how their professional skill-set for classroom teaching is not adequate to support some of the learners with different learning needs and request an external solution:

> *And we're not professional, remedial teachers so we don't know what all the options are to teach them. We're really not trained properly …they [learners] need to be coached*

properly or tutored in a specific way and we don't, we just don't have the time, unfortunately. [Charlene: Park Primary]

…let's get this child tested, let's see which learning environment will suit him and move that child to a place of learning where he will enjoy it, because the child is frustrated here with me. [Vicky: Park Primary]

In these excerpts both Charlene and Vicky have a belief that the challenge of teaching some learners with different learning needs is not what they were trained to do and thus lies outside of their teaching capability. This is evident where Charlene says *"we are not professional remedial teachers."* Furthermore, in Vicky's opinion, some children do not fit in with the rest of the learners and should be moved to an environment where they will be happier and which is more beneficial to their academic progress. This implies that, in Vicky's opinion, there exists a standard which a child needs to attain in class and those who do not meet that standard are then classified differently and should not continue to be educated with rest of the learners. I conclude that this way of thinking constrains inclusive teaching. This is congruent with the findings of Naiker (2007) who argues that to move towards an inclusive way of thinking towards learners with a range of different learning needs teachers must dispense with entrenched special education theories and methods.

These teachers subscribe to the idea that for addressing certain learning needs they need to be reliant on various specialist services to provide, first, diagnoses of learning disability and secondly, provide external specialist assistance. The majority of the teachers doubt their own abilities to teach for all children in the class and feel under-prepared to teach children who they consider are children that do not fit with the norm. This is evident when Charlene says: *"We don't have all the skills needed to teach those children because they need to be assessed properly."* This is aligned to what scholars (Botma, Gravett & Swart, 2000) conclude from a study when they argue that self-doubt in teachers, resulting from under-preparedness for the challenges of teaching to a wide range of learning needs, is a significant constraint to inclusive teaching.

If one considers the conclusion reached by Botma, Gravett and Swart (2000), that internal self-doubt in teaching ability can constrain teachers from teaching inclusively, it is evident from the findings that self-doubt has a direct correlation to the judgements or decisions that teachers make when faced with learner difference. For example, Vicky doubts her own ability to function as an inclusive teacher and as a result desires external assistance from the DoE when she comments: *"We need assistance from the DoE. When we call for help they are supposed*

to step in." Vicky's feelings of self-doubt regarding her ability to teach to learners with different learning needs has the unintended effect of her making a subjective decision about a learner's ability to access lessons, based, to an extent, on her own personal self-esteem or perception of the children's' competence. These subjective decisions, where teachers decide which learners can and cannot be included in lessons, where they take action to have these children removed for specialised testing, and in some cases, removal from the school, are seen by the teachers to often be in the child's best interest. Despite their intentions to care for all learners, this approach with a 'most' and 'some' set of categories between children constrains inclusive teaching. This is congruent with what scholars (O'Shea, Lysaght, Robets & Harwood, 2016) argue when they say that a framework of deficit thinking in education directly informs teacher practice regarding the integration of non-traditional learners into mainstream settings.

It can be inferred from these extracts that a level of confusion exists amongst the participants regarding what constitutes inclusive teaching and what differentiates it from thinking about children and their learning potential from a medical model perspective. This inferential finding supports the research of scholars (Naicker, 2005; Pather, 2007) who argue for the need in education practices to separate inclusive education from the theory and practices of special needs education and demystify the term 'inclusive education' from its associations with special needs education when engaging with schools, society and policy designers.

Most of the teachers felt that their ability to teach inclusively was to a great extent dependent on the range of different learning needs of the children they encountered in their classes and thus out of their control. For the majority of the teachers, they felt that their ability to teach inclusively was externally influenced by factors that were essentially out of their control and thus environmentally determined. From the teachers' perspective, they were of the opinion that there were certain types of learner difference that could be more easily accommodated in the classroom and some that could not. This perspective accounted for by most of the teachers is evident when Sarah from Southern Ridge reported:

> *I think theoretically it sounds fabulous but like practically, to implement inclusive education when you do have such a broad spectrum of, of different types of kids…I think if you've got kids from different sort of cultural backgrounds and things in one class maybe you could be more successful teaching inclusively than if you have a kid who's got Down Syndrome and a kid who's, you know, really bright in the same class. So, I think it depends on what their barriers to learning are whatever they say… as to how it works.*

From Sarah's point of view, certain challenges presented by children with a range of different learning needs are manageable and thus can be accommodated for in lessons. For example, if the range of different learning needs are seen to be cultural differences *"…kids from different sort of cultural backgrounds…you could be more successful teaching inclusively…"* then, in Sarah's opinion, inclusive teaching can be effective. However, Sarah believes that if the child's learning need is specified through a medical diagnosis then that would constitute a situation where these children could not be effectively included in a class with other learners. Therefore, Sarah perceives social diversity (culture) as conducive to inclusive teaching and medical deficit (Down Syndrome) as not normal and therefore not conducive to inclusive teaching, especially when she employs labels such as *"bright"* for children in the same class. In her opinion, the variants are too large for her to be a meaningful inclusive educator. It can be interpreted that some teachers believe that their ability to be inclusive educators in not totally within their control and is significantly determined by external factors beyond their sphere of influence. For them their ability to be inclusive educators falls outside of their locus of control which makes it an uncontrollable entity and thus intimidating.

In some of the interviews, the teachers explained how their previous experiences of teaching children with a range of different learning needs allowed them to gain a sense of control over their ability to manage their teaching environment, which subsequently allowed them to be more resilient to externally imposed circumstances. However, this sense of confidence to be able to teach to a wide range of different learning needs manifested from the ideas of special needs thinking rather than the ideas of inclusive teaching. This was evident in the interview with Theresa where she reported:

> *My experience actually was my years of teaching mentally handicapped children with diverse problems. And my personal feeling is that all teachers must actually be exposed one way or another in teaching those kids, even if it's not, just go for a course [for] teaching those kids.*

In this excerpt it is clear that Theresa is dedicated to teaching children with a range of different learning needs and feels that this is something that teachers need to be committed to do. It is clear that Theresa is dedicated in teaching the learners in her class that she is presented with, however, her use of word such as *"handicapped children"* and her opinion that teachers should go on courses to learn about teaching children diagnosed with various medical conditions is indicative of her orientation to medical deficit thinking.

What can be inferred from this excerpt is that to be an inclusive educator it is necessary to have all the components of what it means to teach inclusively in alignment and within one's understanding and disposal (as described in Chapter Three). Only having one component in place, for example, such as care and commitment to teaching all the children in the class, but without knowledge of the instructional practices aligned to inclusive teaching does not qualify as inclusive teaching.

7.4.4 Empathy towards learners who cannot access the lessons

The majority of the participants felt a sense of injustice and empathy for those learners who, in their opinion, could not cope with the curriculum standards that are externally prescribed or the subject content presented in the lesson. The teachers also felt a sense of pity towards children who they felt could not access the education. This expression of pity from the majority of the teachers towards learners with different learning needs characterised teachers' lens on learner differences. The following excerpt from Charlene of Park Primary illustrates these feelings of pity and empathy towards learners with different learning needs:

> *Now that child cannot cope with what we are doing in class. And not just because of gaps in the knowledge or gaps in the foundation but because the child is really not capable. And it, you know sometimes it really breaks my heart when you know that poor child is sitting there trying so hard…It is so heart breaking.*

In her opinion, she has exhausted all her strategies to assist these children and commented further:

> *You've done everything: you've taken out the cards, you have sat with that child, the child has come during break, um, you've had another learner trying to explain it to the child as well - and they just don't get it.*

She feels that despite all her efforts she has not helped these children with their learning or educational progression. These quotes show how Charlene feels a sense of sadness and empathy for the children she is trying to help. There is clearly also a feeling of pity towards the children who are not managing to keep up with the academic standards set for the lessons.

Respondents also commented on how learner differences made learners self-aware of their own inability to access the lesson content and this had a negative emotional effect on them. This premise that the child is seen as different from the rest because he/she does not cope in class and thus deserving of sympathy was evident when Sarah from Southern Ridge Primary remarked:

And I don't think that then it's necessarily a good thing for the child [being in the mainstream class] because, you know, he's sitting there and he's not coping. I know he's not coping, he knows he's not coping, so does everyone else but, you know, how do you support it in a big classroom environment?

This extract shows that Sarah does not believe that this child should be in her class as he is not able to learn what she is teaching. She intimates that the child is aware of his difference and inability to cope and so are the rest of the learners in the class. This can have a negative impact on both the child's ability to learn and his/her self-esteem. Sarah feels that this is unfair on the child and expresses sympathy for the child who finds him/herself in this situation.

From these interview excerpts it shows that the teacher participants differentiate between those learners who cope sufficiently with the lessons, where they can access the content and lesson presented, as opposed to those learners that do not. As a researcher, I argue that when teachers differentiate between learners on the basis of what they can and cannot do in class it implies that they have set a subjective standard based on academic attainment to discern what academic work can and cannot be coped with by the children. I conclude that this is indicative of bell-curve thinking (Florian, 2015) as there is a norm-reference for what can be achieved, and children either fall above or below that point on a hypothetical and subjectively determined curve. The findings are congruent with the arguments of scholars (Kozleski, Artiles & Lacy, 2012) who conclude that the result of teacher's assumptions around difference and deficit is that marginalisation becomes part of the system of teaching practice which results in a concept called 'othering.'

7.4.5 Teachers demonstrating an action orientation to teaching inclusively

There were many examples from lesson observations and interviews where the participant teachers used inclusive instructional practices. The evidence from interviews showed, that in many instances, the teachers actively collaborated with peers to acquire instructional practices that they directly transferred to the classroom space. Many of these instructional practices were considered to be aligned to the ideas of inclusive teaching that were discussed in Chapter Three.

Collaboration

All nine teacher' participants reflected on how they relied on the direction, collaborative moments or advice from their colleagues to improve or support their classroom teaching. The respondents also reflected upon the various different teaching methods they observed being practiced by their colleagues in authentic teaching contexts when conducting class visits. Collaboration with colleagues and class visits to gain fresh ideas and teaching methods to assist

with their own situation, where they were faced with the challenge of teaching learners with a range of different learning needs, was reported to have improved the teachers' ability to teach inclusively. This was expressed in the following extracts:

> *Um, I ask around… I would go to our colleagues I would say, 'You know what, I noticed that this works in your class how do you do this? [Brenda: Riverbend]*

> *I do think a lot of the knowledge that I have comes from having chatted with fellow teachers and what they've done and what's worked for them. [Helen: Southern Ridge]*

What the teachers explain is how they make a concerted effort in their teaching day to engage in both structured and non-structured collaborative practices with colleagues. Brenda comments on how she actively spends time observing other teachers teaching and then seeks their counsel to find out how they executed various instructional practices in the lesson. Helen again talks about how she spends her time discussing good teaching practice with fellow teachers and how this process has broadened her knowledge. Helen comments further about how her teacher colleagues formally organise to observe each other teach to improve their abilities as educators: "*We're trying to have like a peer sort of review support thing where you go in and watch each other's lessons."* The example of Brenda commenting: *"I ask around"* and Helen saying that she *"chatted with fellow teachers*" illustrated a sense of collaborative 'action taking' where teachers were determined to take ownership of their challenges, where, by collaborating, they can create meaningful learning opportunities for all the children in their classes. This evidence from the respondents was congruent with what scholars (Pantic & Florian, 2015; Bandura, 2001) comment on about reflexivity, where they emphasise the value of teachers collaborating with peers to reflect on their own teaching practices.

The findings showed that collaborative practice to enable the teachers in finding new methods or strategies of meeting the challenge of teaching children with a range of different learning needs was evident at the other three schools. Charlene from Park Primary describes how she takes the initiative to gather information around how to teach to learners with a range of different learning needs when she engages with the broader community and reflects inwards on her own experiences:

> *Um colleagues, workshops, going onto the internet, finding ideas, um sitting asking yourself what it was like when I was a child. I've been chatting to people who are involved with children with disabilities, with learning disabilities specifically - there is where I get our information from.*

This excerpt reflects the individual initiatives of the participant teachers in this study for finding constructive ideas that can be applicable in their classrooms to improve their inclusive teaching. Interestingly, Charlene shows in this comment how collaboration can be a broad information gathering exercise that goes beyond communicating with peers in the immediate school environment. Charlene utilises modern technology available to her such as *"going on the internet"* to engage with a broader community and get assistance.

Evidence from research at Boulder Primary, much like at Park Primary and Southern Ridge Primary, pointed towards inter-staff collaborative initiatives that promoted inclusive teaching in the respondent's classrooms. These collaborative initiatives included first, informal peer-to-peer collaborative discussions. Secondly, the setting of targets to achieve an agreed upon outcome that benefited children's' learning. Thirdly, teachers learning from other teachers' practices by visiting each other's lessons and finally, the setting up of organised and structured collaborative group interactions that could be monitored, minuted and evaluated by the group. The concept of collaboration where teachers work together in organised groups was evident when Philemon commented: *"we work together [teachers]. I sit with them and show them that this is the part that we are dealing with at the moment. So, when they deal with that…they are going to deal with the same part."* Philemon explains how through collaboration with colleagues they can plan cooperatively to address a child's learning or a teaching issue. From this exercise the group can have a set plan in place to achieve a desired outcome, where all members have a role to play in the collaborative solution to a problem.

There were also instances where the teacher participants explained how they as teachers and available learning support specialists pooled their collective knowledge and skills to assist a child that needed to be included in lesson activities. This mitigated the alternative, where the child would sit in the class and not participate, or in some cases be recommended to a special needs school. This is evident from an excerpt of dialogue that was reported about an experience that Theresa at Riverbend Primary had with one of the learners in her class. The learner was physically disabled. Theresa explained:

> *The OT and I designed him a button which we fitted with a strap on his shoulder and actually we connected that to a computer. On my word that kid could write. He could write full sentences; he could actually read a reading piece on the computer. We need to actually figure out how to try and find that golden moment and make it happen for them. And then what we've done eventually - I mean that was a huge chapter in that child's life - the parents were, I can't tell you, they… Then Chris started helping to design little computer things for him to take home so that the parents could interact with him.*

Theresa explains how she collaborated with the Occupational Therapist available to the school and a teacher called Chris (pseudonym) who had specialised skills with computer applications technology. Through the formation of a collaborative partnership they were able to find a way to allow this child in question to more fully participate in Theresa's lessons. In this case all the collaborative participants had a role to play and were responsible and accountable for fulfilling their role. This is an example that is representative of similar experiences by other teachers where collaboration, in this case with specialists in separate fields, formed accountable partnerships where all take responsibility to promote inclusive teaching. These findings are congruent with what scholars (Oswald & De Villiers, 2013; Kanter, Damiani & Ferri, 2014) conclude from their research studies that collaborative relationships between teachers and support specialists can improve inclusive education in schools.

Findings showed how the respondents used collaboration with their peers as a way to overcome their own insecurities and low self-esteem with regards to their ability to be inclusive teachers. For many of the teachers the challenges they felt in trying to teach to learners with a wide range of different learning needs was overwhelming. Most of the teachers found that by collaborating with their peers they could lessen the anxiety they felt with regards to meeting the challenge of teaching learners with different needs. For example, in an interview with Brenda from Riverbend Primary she explained how she perceived her ability to include all learners effectively into her lessons and how she sought out collaborative moments with peers for support:

> *Not very high at all [rating herself]. I think it is just something that is very new to me and I just sort of try to go along with it. I normally do rely on the advice of people who have either taught that person or who have got more experience and I sort of just go for help there. I really don't try and come up with something by myself, I am not very good at thinking about what to do.*

In this extract Brenda shows that she is lacking in confidence to teach inclusively and does not trust in her own ability to find inclusive teaching solutions. Despite these insecurities to teach inclusively she seeks help from her colleagues and collaborates in finding inclusive teaching solutions to provide for all her learners different learning needs. These findings are congruent with the research of Carrington and Saggers (2008, p. 802) who conclude that collaboration between teachers and the community is a critical component in the development of an "inclusive ethical framework."

7.4.6 Teachers teaching inclusively: Inclusive teaching principles in learner engagement

Many teachers reported on or demonstrated teaching incidents in the classroom during my lesson observations where they considered or demonstrated teaching practices designed to meet the challenge of teaching learners with a range of different learning needs. Helen from Southern Ridge explains how she focusses on the needs of every individual by devising strategies that address a particular learning need whilst simultaneously building a sense of learner confidence and trust:

> *I disengage from this lesson and [think] how am I going to pull him back in? And maybe take a step back, maybe take a step sideways but how am I actually gonna engage him again and get him to realise it's not actually as difficult as he tells himself it is? Um and then with the two other kids who really struggle so they sit at the front, so I can watch them. Um and then doing stuff like whiteboard work I can watch very carefully to see does he actually know what's, what's going on? So today I was watching very carefully, he labelled most of the angles wrong, so I do just keep an eye on him and say, 'No, no, no look at it carefully, look at it again.*

This extract shows how Helen spends time thinking about how to build the confidence and self-esteem in a learner: *"get him to realise it's not actually as difficult as he tells himself it is,"* and try to devise a method of teaching to internalise the content of the lesson in a way that is meaningful. Helen's attempts to develop self-confidence in her children aligns with the research of scholars (Hart et al., 2007) whose research into the specific purpose of *affective purpose* where teachers are required to enhance feelings of confidence in learning and a positive outlook on schooling for a learner. This quote also shows reflexivity in how Helen can '*disengage*' from the lesson and reflect on how she intends to meet the challenge of addressing the different learning needs of one of her learners. These findings are congruent with scholars (Rouse 2017; Sapon-Shevin, 2007) who argue that getting teachers to teach inclusively requires them to constantly re-evaluate how they teach, constantly question their own practice and reconsider their attitudes and beliefs that inform their teaching.

Having children feel accepted in the school and classroom amongst their peers was foregrounded by many participants in the findings. For example, teachers at Boulder Primary School showed a commitment to making learners feel accepted for their unique individuality. A technique used to include learners rather than alienate them was to explain concepts in the child's mother tongue. This is evident when Olive said,

In their mother tongue, ja. Even when we read, story reading, I try and explain it in their mother tongue the, the difficult words. And then when you ask questions some will answer and then some will have, still have problems, but then go back.

Olive's explanation of how she tries to include learners by communicating in their mother tongue aligns with the research of Agbenyegba (2015) who explains how an example of whole class teaching is where the teacher uses specific 'language while teaching' to expand literacy and numeracy concepts. What Olive demonstrates is a form of whole class teaching as an inclusive instructional practice as she is sensitive to the language barriers and cultural diversity that she is presented with in her classroom audience. Similarly, other respondents were also sensitive to issues of communication and commented on how it was important for children's voices to be heard and for children to feel that they matter and are valued. For example, Charlene from Park Primary School said: *"I give them ample opportunity to have their say - say what they need to say."* Here Charlene is conscious of allowing every learner the opportunity to actively have their say in class where they voice their opinion and feel recognised and accepted by the learning community.

Most teacher participants reported on how they considered ways to approach the teaching of lesson topics in order to make them accessible to the range of different needs of all learners. This was evident in this post-lesson-observation interview with Sarah from Southern Ridge where she said: *"Well I think when you're preparing you just have to think about the different kids you've got in your class and how they're going to, um, approach the topic and sort of what they're gonna need."* This remark by Sarah shows how she tries to approach her teaching in a way that sees her consider the needs of every child. This approach to teaching is congruent with Hart et al.'s (2007) principle of *everybody*, which articulates as the teacher's commitment to act in the best interest of every child. For Sarah, developing teaching practices that can assist her in including everybody in the lesson requires inclusive thinking when preparing lessons. Sarah explains how inclusive teaching requires the teacher to think and plan ahead before executing the lesson: "*when you're preparing you just have to think about the different kids."* The concept of teaching for *everybody*, as described by Hart et al. (2007) was also demonstrated in teaching situations and discussed by most of the other teachers in their post lesson observation interviews and found to be synonymous with the thinking of most of the teachers. Brenda from Riverbend commented: *"I realised that some [learners] might not have the general knowledge or vocabulary as others, so I did also try to use a whole lot of different scenarios for… human activities and physical features."* Here Brenda was conscious of the different levels or range of general knowledge and vocabulary of her learners in her class. She

tries to use a variety of scenarios in her teaching where all the learners can benefit from the lesson. This is an example of Brenda using a whole class teaching technique.

In these extracts, teachers show how they try to give learners a voice, consider the knowledge they bring to class, and take into account the language learners are most familiar with speaking. These findings align with the research of scholars (Naidoo, Singh & Cassim, 2015, p. 134) who examine how different 'whole-school' inclusive teaching strategies can be useful to assist in creating meaningful learning experiences for all learners so they can be a part of the lesson, instead of the teacher requiring teaching techniques that specifically target individuals with diagnosed medical deficit related learning problems.

7.4.7 Co-operative learning strategies for inclusive teaching

The majority of the teachers demonstrated or reported on instances where they used group work and peer-to-peer teaching strategies in accordance with what Florian and Linklater (2010b) describe as inclusive teaching strategies. This was evident when Philemon from Boulder Primary said: *"They know, they know each other then they can be able to come down to their level. So normally one of the things that I use, I use the, the peer group. But I understand that using their friends it's very easy for them."* Philemon encourages interconnection and peer-to-peer engagement in class between the learners, based on whom they think they could best learn from. Philemon encourages learners to work with each other, allowing for more social interaction. This makes the lesson processes easier for the learners as learning becomes a social activity. Philemon also explains how, in his experience, when learners work with their peers, they can better assist each other with the understanding of content and concepts: *"…because with learners I think it's easy for them to understand each other."*

This observation was not an isolated event. I observed that most of the teacher participants allowed and encouraged the learners to randomly pair-up in groups. This allowed the children to share their expertise and personal knowledge and also for them to interact socially. Vicky from Park Primary school comments in her post-lesson observation interview*: "Yes, we've got all races, all cultures. The kids integrate well together as a group and in class you'll see that I've paired them up just randomly um so that they, especially in English, they must learn to communicate effectively with one another."* Vicky demonstrated and commented upon her awareness of the cultural and racial diversity that she is presented with in her learning environment, and how she encourages social and cultural integration between all her learners by allowing for collaboration and the sharing of ideas. This excerpt also demonstrates how

Vicky arranges her learners randomly. This process challenges the learners to communicate with different people and experience diverse cultures. This example resonates with the research of scholars (Loreman et al., 2010) who explain that when assigning learners to co-operative groups they should be heterogeneous and be composed of learners of different backgrounds, cultures, genders and with different achievement levels. Therefore, based on the literature Vicky demonstrated that this aspect of her instructional practice afforded inclusive teaching methods.

The majority of the teachers dismissed the idea of ability grouping in their classes on the basis that this was counterproductive to inclusive teaching. The teachers' reasons for this were that ability grouping had the potential to negatively stigmatise some learners who might feel that they are less able than their partners. The teachers felt that this carried the danger of accentuating children's differences in a harmful way. For example, Brenda from Riverbend Primary said, "…*I'll completely mix up the class [randomly] just to make sure [no child feels singled out] … that there aren't two children with specific diversities working together."* Here Brenda is aware of the negative impact of segregating learners according to a specific difference and consciously makes an effort to completely mix up the children so none feel targeted.

Many teachers encouraged the formation of heterogeneous or mixed learner peer-groups and encouraged peer-to-peer learning and teaching to take place in their classes. This was confirmed in the post-lesson-observation-interviews by most of the teachers and is shown in these remarks:

> *So, all of them in one group actually carry each other and it just spontaneously happens. And it's a social little group. But you'll find that the academic, more strongly inclined kid, will actually carry the weaker one. [Vicky: Park Primary]*

> *Maths in um to try and almost get them to peer teach because you know I've been doing fractions until they're coming out of our ears, but I think there are still some kids who are struggling. So hopefully if they teach each other then it'll almost solidify the kids who do know what's going on and try and bring in the kids who are struggling and by mixing up the groups I'm hoping that they'll be able to help each other. [Helen: Southern Ridge]*

Teachers encouraged the learners to seek out peers that would assist and add expertise to the task that needed attention. In both these comments Vicky and Helen both explain how they allowed the children to choose their own groups but how the children spontaneously gravitated

to peers that could assist them where they felt they needed help. This showed that the learners were comfortable to work with each other to understand concepts and unknown knowledge.

These findings are congruent with the research of scholars (Florian & Linklater, 2010b) who explain that instances where teachers encourage learners to engage in conversation, decision making and knowledge acquisition is indicative of inclusive teaching (Florian & Linklater, 2010b). These findings are also aligned to the research by scholars (Spratt & Florian, 2015; Forgasz & Cheeseman, 2015) who argue that co-operative learning must not be organised as ability level grouping as this has the potential to segregate learners which only serves to aggravate exclusion. Finally, the comments made by the respondents where they recognise the value in co-operative teaching are congruent with the research of Mitchell (2015) who explains how co-operative learning recognises that when learners collaborate by working together, they often achieve results that are greater than the sum of their individual efforts or capabilities.

Many of the teachers were aware that their teaching methods could create anxiety for the children if they felt isolated or in danger of being singled out or found to not know the answer to a question in the presence of their peers. I found that many teacher participants employed co-operative instructional practices to minimise the anxiety that learners felt in class. For example, Brenda from Riverbend Primary organised learners to work in co-operative groups, so that they could collaborate on problems and learn from one another in a non-threatening environment:

> *In case of children who were a bit weaker and a bit panicked at not being able to answer a question themselves I always partnered them up with somebody else. I could then call upon either one and it wasn't the stronger one who was grasping the concept and able to answer it.*

This showed that using co-operative learning strategies increased the confidence of the learners and decreased their anxiety levels. Brenda was also aware, that through cooperative learning, children were able to avoid competitive situations which carried the risk of negatively impacting on their self-confidence:

> *I just made sure that um they did this in groups and that every child in the class um looked for a word that they didn't understand just so that those who might have had more than others or who were too shy to put up their hand with the word that they didn't understand didn't feel scared or different to anyone else if they did have a word.*

In this example Brenda ensured that by working in groups the learners never felt anxiety or stress at not knowing what others knew and a chid never compared his/her knowledge to that of the next child.

What was also observed and reported by most of the respondents was how learners who felt anxious or lacked confidence in themselves, or their academic abilities, improved in confidence and self-esteem when provided with an opportunity to complete classroom-based activities with peers in group scenarios. I noted in my researcher's journal:

> *Researcher's lesson observation 2: Philemon from Boulder Primary placed learners into groups in the maths lesson on fractions. This was done randomly, this was done by seating convenience, the children grouped up with the closest person. They assisted each other and responded to questions with much more confidence than when they worked on their own as was observed at the beginning of the lesson. In the beginning of the lesson, when learners worked individually, they were observed to be less included to offer up an answer to a maths problem as they felt isolated or self-conscious and in competition with others.*

These observations support the work of Hattie (2008) whose research findings show that when children are pitted in competitive, individualistic learning scenarios, they are less successful academically and more stressed than those learners working in collaborative learning scenarios. Also, co-operative learning allowed for learners to improve their ability to build social skills and relationships, as they participate in the lesson activities. The teaching of social skills, as a strategy for inclusive teaching, has a strong footprint in the literature (Florian & Rouse, 2005; Shoenfeld, 2012; Sapon-Shevin, 2007).

7.4.8 Work choice

Florian and Black-Hawkins (2011) refer to a specific type of classroom inclusive instructional practice, from a study, which they refer to as *work choice*. From the lesson observations and post-observation interviews with the teacher participants there was evidence of this strategy being applied in the classrooms by five or the nine teachers. By utilising the strategy of work choice Vicky encouraged the learners to engage with a choice of written media of their choosing to answer questions.

> *Um, you see in my previous lesson in term two, when I started advertisements with them…we had a media centre period where we went to the media centre and there's quite a wealth of information in terms of the Time Magazine, we subscribe to them, we've got the newspapers out there. So, I got them involved chatting in groups, we looked at the various media the newspapers, the magazines and whatever we had available and we worked in groups, I divided them and then they took out books to answer questions. [Vicky: Park Primary]*

What was observed in this lesson was a defined learning activity provided by Vicky, accompanied by a selection of tasks, with learners then choosing the task they wanted to complete and the magazine article that they found interesting and of assistance to answer the

questions. *"A variety of tasks that were applicable to the teaching materials were intentionally made freely available to all the learners who could then select the task they felt comfortable with." [Researcher's journal entry: lesson observation 2 Vicky]*. Also, through Vicky's instructional practice she demonstrated that by allowing learners to choose their own activities she has trust in their decision making around their educational growth.

I observed Sarah from Southern Ridge teach a Grade Five class mathematics. These observations were recorded in the researcher's journal.

> *In the lesson observed Sarah organised a variety of different 'stations' that instructed on a variety of activities accompanied by a task that was applicable to the content taught. The researcher observed that the learners were encouraged to choose the task that corresponded to their own perceived ability levels." [Researcher journal entry: Sarah, lesson observation 1].*

During the lesson it was observed that the different tasks focussed on the same concept or topic that fulfilled the outcome of the lesson. However, the task-based questions ranged in difficulty. Sarah provided the learners with instructions to choose the activity that they felt most at ease completing. They were trusted to make their own choice. The learners were then invited to try different 'stations' when they had done one. Although Sarah was not familiar with the terminology of '*work choice*' as described by Florian & Black-Hawkins (2011) in their research paper, she was observed using this technique in her teaching.

7.4.9 Making activities accessible to all learners

Scholars (Griggs & Medcalf, 2015; Florian & Black-Hawkins, 2011) explored the concept of the teacher making activities accessible to all learners, rather than most learners at the expense of some. This requires that teachers consider the accessibility of the lesson for all the learners through the learning activities and instructional practices they provide. Instances of whole class instruction was evident with most of the teachers, where multiple learning opportunities were presented and considerations of learners' differences were made in order to maximise the child's opportunity to be actively involved in his/her own learning. The data showed that eight of the nine teacher participants made efforts to create learning activities that were accessible to all the learners to meet the challenge of teaching to a range of different learning needs. This is evident when Brenda and Theresa commented:

> *Um I try to do a mix between visual and audio learning, so I used a lot of visual tools - lots of pictures to explain things that I was talking about. I printed out pictures of those visuals so that students could look at them closer if they needed to, if the board was too difficult. Um I tried to make sure that all students with visual impairment, if they wore*

glasses, they could be able to see everything that I was talking about. [Brenda: Riverbend]

I've pasted a worksheet in their books. So now for the kids who actually don't read well, me doing the power point immediately…it makes sense to them because now I'm reading it with them so through that, hopefully they actually now also would be able to go read the content eventually. Then hands on with that practical[exercise] in their book. That's now for…the kid that is not even doing very well with their reading. So, there's three different learning methods in one academic lesson. And then the terminology, by repeating it constantly, I mean I read it, they see it on the board, we, they hear it, we… through that eventually they actually grasp the terminology. [Theresa: Riverbend]

Brenda explained how she considered finding a method or strategy of teaching that would allow all the learners to access the lesson materials and the lesson activities as she went about her teaching: *"…audio learning…printed out pictures…had them written down just in case…"* to ensure that all the learners have a meaningful learning experience. Similarly, Theresa showed how her simultaneous utilisation of worksheets and power-point presentations, and her actions of repeating new terminology, showed that she was attempting to teach in a way that is accessible to all the learners. Spratt and Florian (2015) describe a feature of whole class instruction to be where teachers can find an 'everybody' response through their instruction to address individual difficulties in learners.

These respondent excerpts were supported by what was observed by myself in the lessons:

The teacher used a variety of techniques that included repeating words that were unknown to the children allowing for both oral responses, as well as written responses to questions and having learners work in groups." [Researcher journal entry: Theresa lesson 2]

Theresa was observed using a variety of instructional practices to present a learning activity to her classes. Theresa's instructional practice highlighted various ways in which she could include all the children in the lesson so as not to alienate any learner.

These observations were supported by Theresa when she commented on how she used probing questions to elicit information on what children knew or did not know about a topic:

I don't know if you picked up, while I was actually asking questions and implementing the knowledge and see what they actually knew, I stopped, and I would go back to some of the kids because as I was asking I could pick up who did not understand even the question at all.

In this extract, Theresa was conscious of the fact that there were always children who would not understand an aspect of the lesson she presented. In these cases, she would use a whole-class teaching strategy to ensure that all the learners had an opportunity to understand the

concept. Scholars (Florian and Black-Hawkins, 2011; Hattie, 2008) describe whole-class instruction as being where the teacher involves everybody in the class activities. Furthermore, the teachers, are seen through these findings, to be making a conscious effort to support the rights of every learner in the class to participate fully in the activities, where learner difference is supported and where the challenge of teaching to a broad range of learner differences is met. This is accomplished through the teachers embracing whole-class instructional methods when teaching. These findings are aligned with the research by scholars (Boyle et al., 2011; Anderson & Boyle, 2015; Dixon & Verenikina, 2007) who argue that inclusive teaching is an experience where both learners and teachers increase their tolerance, understanding, the value of difference and the rights of everyone to participate in a just and fair education community.

7.4.10 Evidence of planning for inclusive teaching

For the majority of the teachers, planning for inclusive teaching formed a part of their lesson preparation. This preparation was evident when the participants were teaching those lessons that I observed in the lesson observations. The instances of lesson preparation were also discussed in the post-lesson interviews. To teach inclusively requires that there is a conscious reflective thought and action planning process that accompanies the lesson preparation. The literature (Bandura, 2001; Pantic & Florian, 2015; Katz, 2015) explains how cyclical repeats of goal planning generates a process or reflection-action-reflection which improves the teacher's ability to teach inclusively.

There were examples from the findings, where many of the respondents, made a conscious effort to plan teaching strategies to meet set goals for teaching to a wider range of learning needs. Theresa describes how she plans for inclusive teaching:

> *And I will cater in my lesson planning, I mean you'll always have your high, middle, low, so in even a worksheet I'll start off with very high tech your, your intelligent questions, then your medium questions, and then I'll always end with either maybe a research, a practical, something where everybody can now get a mark.*

This excerpt demonstrates how Theresa tries to prepare her lesson activities to meet the challenge of teaching learners with range of different learning needs. Although Theresa showed that she planned beforehand on how the teach all the children so that all could access the lesson her comment shows that she has a proclivity towards bell-curve thinking. This is evident as she predetermines the ability levels of the children and what they are capable of by designing them worksheets at different ability levels.

Most teachers spoke about how lesson preparation must consider that different children know different things and have varied interests. In Theresa's opinion, lesson planning must consider that not all the learners have the same mental construct of an idea and that the teacher has to find or create teaching resources to represent the content of the lesson in different and creative ways. This was evident when Vicky from Park Primary School commented on how she plans for an English lesson:

> *[Planning]… I think with especially English, the trick comes in visuals, especially with creative writing. If you have a story and you want them to write creatively and you give them visuals and maybe we'll be talking about a day at the beach for grade four's and you give them different weather patterns and you work with a language activity, dictionary work that helped as well, whereby you give them pictures of different days at the beach where there was a thunderstorm, where there was a lovely sunny day, whether there was an incident of a shark bite or something to that effect.*

What Vicky shows here is how she has chosen a variety of visual images and references that will reach out to a wider audience of learners in her class. Achieving this range of resources required preparation and thought on how to make the lesson accessible for all learners. These findings which demonstrate how teachers make preparations for teaching that consider the learners' contextual experiences aligns with the research of scholars. Greenstein (2014) recognised the need to be aware of the contextual experiences that learners bring to class in order to make learning inclusive. Florian and Black-Hawkins (2012) recognises that there needs to be a thematic approach to how the curriculum is taught that allows all learners to access the information in a flexible way. Essentially, the crux of the issue for inclusive teaching is that teachers must plan for the range of learning differences of individuals while planning instruction for "everybody" (Spratt & Florian, 2015, p. 93).

What became apparent in lesson observations and interviews was that teachers made the effort to consider how they would modify the way in which they teach the prescribed curriculum. This improvisation to accommodate the needs of all the learners was discussed in the interviews with the teachers. In this extract Vicky describes how she modifies the curriculum objectives by adding different activities to include learners in the learning process:

> *When they [curriculum directive] ask you to do a listening comprehension, so then maybe you follow the curriculum in terms of giving the kids a listening comprehension but then you assist them with reading the questions and writing the answers. Or with the Maths if it's, um, you know, they're getting assessed on something then you give them a whiteboard to help them, you know, draw the pictures if they need to for Maths and things like that.*

Vicky explains how she has evaluated the curriculum content and the external teaching directives and considered them to be insufficient, in the prescribed form, for use in a context with learners with a range of learning needs. After a process of evaluation Vicky added reading questions for English activities or in the case of mathematics lessons, presented children with the option of using a whiteboard. In both instances Vicky showed how she devised teaching techniques to accommodate the range of learning needs. This finding aligns with the literature where scholars (Corrigan & Smith, 2015) spoke about how the inclusive teacher must simultaneously focus on both 'what' needs to be taught and 'how' it should be taught rather than who should be taught. It is evident here that Vicky considered the 'what' and the 'how' component around teaching curriculum materials in her lesson design making this an inclusive practice. Vicky's explanation of how to adapt a lesson for all learners' benefit is also congruent with the research of Valiandes (2015) who argues that inclusive teachers must adapt lesson activities and tasks where the teacher provides a range of further learning tasks that range in difficulty.

7.4.11 Teachers re-evaluating their teaching to inform their practice

In all the conversations with the teachers they referred to specific examples where they evaluated the outcomes of a particular lesson after it was taught with regard to how well they were able to include all the learners and whether all the children achieved the predetermined outcome. The teachers' views were, that in many cases, they found lessons could be improved upon to reach more of the learner audience. The fact that the teachers articulated to me that this was important for them was significant, as it showed that intrinsically the majority of the teachers have the learning interests of all the children in mind and through their own initiatives seek to find solutions to improve their inclusive teaching. This was evident when Philemon from Boulder Primary commented:

> *Yes, before I teach a lesson, I think about those learners…we do have this kind of learners. So, but now I first present my lesson. And then after presenting my lesson I will, I'm going to go over the outcomes from my lesson.*

Philemon explains how after presenting a lesson he goes over what he has done in the lesson. This allows him to make adjustments to his teaching in order to make his lessons and the activities contained therein more accessible for all the learners. In other words, Philemon is constantly looking to improve his teaching to reach a wider audience and become more effective. In another interview Charlene said:

I have vowed to do something different, so now I have learnt this did not work… I need to change it now. What I have been doing is doing research. I have been chatting to people who are involved with children with disabilities.

Here Charlene explains how she reflects on her practice to improve her inclusive teaching by doing things differently, and as with previous excerpts that discussed collaboration, she actively seeks out and collaborates with others to assist her where she feels she has been ineffective whilst teaching in the classroom. These findings that reflect the majority of the teachers' views aligns the work of scholars (Rouse, 2017; Walton, 2018; Goodley, 2007; Gunn, 2003) who argue that inclusive teaching requires teachers to constantly re-evaluate how they teach and critically examine, question and deconstruct disabling classroom practices.

7.5 School Management support for teaching inclusively

It was observed that at all four research sites the teachers had little influence on management decisions and had to conform with the operational instructions that were directed to them. The teachers reported that the schools' leadership teams were tasked to ensure that all teachers operate according to the mandates of the school's internal code-of-conduct for educators, and that they adhere to the instructions of the standing orders of the Department of Education (DoE), and that the teachers themselves were aligned to each school's ethos which was supported by the school's vision and mission statement. A principal, as the central leader of the school, would coordinate and lead the senior management meetings. As well as general operational decision making discussion related to school functioning, management meetings also discussed strategies and operational procedures for how to manage children with different learning needs in the school. These conversations would have a direct impact on resource allocation for the support of learners with different needs to preferred teaching practices that aligned with the ethos of the school. The principals had the final say or veto on all decisions made in formal management meetings. This was reported by the teacher participants and the principals to be the standard operating procedure at all the schools. The final decision making power of the principals was accepted practice in the schools, as they were directly accountable and had to report back to the Department of Education (DoE) or the school's governing body structures on the success or failure of an initiative that had been decided upon. The principal carried the overall accountability to these external bodies, so it was accepted that he or she has the final say on all matters. There was very little, if any, opportunity or formal platform for teachers to make comments or provide input that might change what was decided upon by management, even if they were frustrated by what was arranged. Teachers were allocated

portfolios that stipulated their designated occupational role and beyond this they were neither expected nor encouraged to have any say on school operational mandates. It was noted by myself that there was no formal platform in any school for teachers to voice their opinions or make operational suggestions. Weekly staff meetings held in the staff rooms were platforms for the principal to relay operational instructions for the teaching week to follow. Essentially, the principals of the four schools had a great deal of influence on the way teaching and learning was coordinated during their tenure. This observation is relevant within the context of this study when one considers that it is argued in the literature (Walton, 2011) that principals have an influential and decisive role to play in promoting the ideas of inclusive teaching. Walton (2011) also concludes that the management or leadership of a school in South Africa is influential in setting the tone for how teachers go about their daily classroom-based activities.

The boundaries of this theme are the feelings or experiences that teachers had regarding the support or lack thereof by the leadership towards teaching inclusively. Most of the teacher participants felt that the support they received from the schools' leaders, most notably the school principal, was decisive in determining their ability to teach inclusively. This is evident in Sarah's interview extract where she discusses the direct, positive or negative influence that school principals have on her ability to teach:

> *In the first year that I was teaching there was a different headmistress and she literally did nothing to help out at all. It was massively emotionally draining when you don't have management support for your teaching initiatives. Looking back, I don't know how I coped that year. It makes a huge difference to have management support.*

Sarah feels that the lack of support she received from a previous headmistress negatively affected her emotional state and had a direct and negative impact on her teaching. Sarah also questioned her ability to cope in her role as a teacher with an unsupportive school leader. She explained how it was emotionally draining to have no leadership support for her individual efforts to make a difference in the classroom with her teaching initiatives.

Seven of the nine teacher participants complained about a lack of support for their teaching initiatives from the principal as having a negative influence on their ability to teach inclusively. Helen from Southern Ridge Primary was asked by me to explain the extent to which she felt that the school principal and the rest of the leadership team provided her support in her efforts to teach inclusively. To this she responded:

> *Because, when your job is becoming so much more difficult and you feel like you're not supported [school principal] in doing that [inclusive teaching], it becomes almost impossible. It's, it's very, very difficult and especially when there's very little teacher support.*

In Helen's opinion, the lack of support she received from the principal for any initiatives to teach inclusively made her job of teaching to all learners extremely difficult. Helen felt that the school's management team allocated little formal time for teachers during the teaching week to discuss their education needs in the classroom, either with peers or with members of the leadership team, where viable solutions could be discussed to devise ways to assist with the learners with a range of different needs. When teachers feel unsupported they lose motivation. This was evident when Helen explained how her job becomes *"Almost impossible."* Having this feeling that her ability to teach effectively was compromised left Helen feeling defeated and demotivated. At Boulder Primary School Lydia had a similar response to questions about the extent to which she felt supported by her principal for inclusive teaching. In Lydia's response she criticised the lack of support that she received from the school principal in meeting the challenge of teaching children with a range of different learning needs and how to respond to them: *"You yourself you just devise means of healing them, keep on yourself. The school doesn't help at all."* Lydia intimates that she does not receive any substantive support from the leadership of the school. In her opinion support for teaching is not a priority as this is not foregrounded by the leadership structures. These findings align with the work of scholars (Gous & Eloff, 2014; Engelbrecht et al., 2005; Walton, 2011), who argue that the attitude of the management team is a critical factor in determining the extent to which inclusive teaching gains traction in a given school environment. Lydia resigns herself in making do with her own knowledge and ideas on how to teach to children with a range of different learning needs. There is an element of resignation and defeat in Lydia's words. She feels abandoned in being 'made do on her own' (*"keep on yourself"*) in a challenging environment. Lydia's feelings of isolation are apparent in her use of the words *"...devise means of healing them..."* Lydia sees her individual and unsupported efforts as being necessary to make a curative impact on the lives of these children, where others have no concern for their wellbeing. Essentially both Helen and Sarah feel that they have been left unsupported and disempowered by the lack of support from the school's leadership. These findings are congruent with the work of Loreman (2007) who argues that school leadership plays a critical role in creating an environment that respects diversity and provides support through empowerment.

From the scholarly literature (Loreman, 2007; Gous & Eloff, 2014; Engelbrecht et al., 2005; Walton, 2011), that discuss the critical and determining influence on school functioning that can be ascribed to school leadership, I deemed it necessary to record and discuss the views or perspectives of the principals on their impressions of support provisions in their schools for inclusive teaching.

The evidence from the findings showed that the teachers criticised what they considered to be a lack of priority given to the allocation of teaching time by school management that was necessary to teach children effectively. This was evident when Vicky from Park Primary commented in response to being asked how the school leadership impacted on her ability to teach inclusively: *"… A huge challenge. Um this week we have athletics, we have um we had a fun walk…no consideration …"* Vicky expresses frustration at how management is seemingly invested in 'additional' extra curricula activities, in this case athletics and a fun walk, which inevitably limits her teaching contact time. She also said:

> *This is the last week of school and I haven't completed the syllabus, we are always having galas and mornings that we have had for fund raising. That is time that comes out of my CAPS curriculum.*

She feels that the school leadership prioritises additional events or extra-curricular activities that further erode already limited teaching time. In her opinion, which reflects the feelings of many of the other participants at the schools, completing the curriculum is often regarded as a secondary objective of school leadership whose objectives for the school are different and thus not aligned with the teaching obligations of the educators. This state of affairs as to how the school day or term is structured with regards to activities in teaching time leads to tension. These findings support the work of Loreman (2007) who argues that principals and management play a critical role in schooling structuring. Based on Loreman's (2007) argument, the data shows that the focus on the structuring of the school day at Park Primary School does not prioritise inclusive teaching.

7.5.1 The principals' views on their support for inclusive teaching in their schools

The principals at the four schools commented on the lack of prioritisation they give to the ideas of inclusive teaching in their leadership capacity. For example, the Principal of Boulder Primary School was asked to comment on his personal efforts to promote inclusive teaching and create policies to advance the ideas of inclusive teaching at his school. He was also asked to comment on the extent to which he considers his school an inclusive school. The principal responded: *"Mmm, what I would say, minimal, I am not happy about what is going on [with*

inclusive teaching], I think it's a minimal scale." The principal indicates his unhappiness with the amount of effort he and his staff are placing into promoting inclusive teaching. He intimates that he is aware that little is being done in terms of policy to promote inclusive teaching and is of the opinion that efforts to advance the ideas of inclusive teaching are only on a small scale. This statement by the principal resonates with the findings of scholars (Davidoff & Lazarus, 1997; Engelbrecht et al., 1999) who conclude that the formulation of policy, allocation of technical and human resources, school culture and the development of operational management structures are deemed to be necessary components that leadership needs to constantly drive to make inclusive education a viable reality in their schools. When considering this scholarly research (Davidoff & Lazarus, 1997; Engelbrecht et al., 1999) I conclude that due to the lack of support by school leadership, inclusive teaching will not become a viable reality in Boulder Primary until leadership drives the change through executive directed action that motivates for a school that is inclusive and that is supported with sound policy initiatives. The status quo at the time of this study at Boulder Primary is indicative of apathy for promoting inclusive teaching.

The findings showed however that individual apathy, by the principal, resulting in a lack of promotion of drive for the ideas of inclusive teaching, is not the only reason that school management is not promoting the ideas of inclusive education at the research sites. Two other factors that were apparent constraints to inclusive teaching emerged. These warrant discussion. First, in some instances, the historically determined ethos of the school or ingrained traditions of the school, created contradictions that were difficult to overcome. Secondly, the entrenched intrinsic mind-set of school leaders influenced internal school policies in how to address the issue of teaching learners with different learning needs. One principal referred to how the historically motivated academically orientated ethos of the school dictated the amount of teaching time allocated to each subject in the timetable. For example, the principal of Riverbend Primary School mentioned how certain quantities of teaching time for core subjects like Mathematics, Science and English are removed from the timetable to accommodate option subjects like entrepreneurship or business studies. These are seen by the school community as more important for the academic child. The findings show how this negatively impacts on inclusive teaching:

> *Those periods (additional subjects promoted by the school) have to be taken away from Maths and English and Afrikaans and Science and History and Geography, so the children have to be able to cope with the amount of work and the standard of work in fewer periods. And so, it is quite a challenge to the normal academic child, if I can put it*

> *that way. And so, where children with disabilities are able to cope with that academic standard we try to include them in our school community, but obviously where a child is needing extra help academically we don't really have the resources, the staff or the time to become fully inclusive.*

What the principal outlines is that the way the teaching timetable is structured with less teaching time allocated to core subjects and more to 'enrichment' subjects, is not conducive to the ideas of inclusive education. The principal comments further on how the school's ethos has an academic focus that does not consider the ideas of including all learners into lessons (Florian & Black-Hawkins, 2011). The principal continues:

> *I think it is limited [inclusive teaching] because of our ethos, our school's ethos of actually extending the top pupils, more than helping children who have academic challenges. I think that's our product and I think because of that it [inclusive teaching] is to a limited amount.*

The principal explains how a motive of the school's ethos is for the academic standards to be prioritised and thus the primary objective is to extend learners at the upper percentiles of a given population. The principal infers that they are more interested in assisting what he refers to as 'top pupils' than making teaching and learning available for all. This implies that the children must fit in with the school's systems rather than the school adjusting to the needs of the child. This sentiment is further captured when the principal comments: "*I think the demands of the parents, the expectations of the parents - we are very goal-orientated academically, especially we're preparing children for our colleges."* Here it is explained how the ethos of the school is influenced by the parents and expectations for high academic standards and is not in the interests of teaching to learners with different needs. I argue that this kind of thinking is in opposition to the ideas of inclusive teaching. My conclusion is congruent with the literature where scholars (Kozleski, Artiles & Lacy, 2012) argue that the result of the marginalisation of children becomes part of a system-of-practice in schools leading to 'othering.' A perfunctory role of a principal is often to ensure that the ethos of the school is manifest in all facets and functions of the school. This is set out as a key performance indicator in their job description. Where Riverbend Primary School is concerned, the historically motivated ethos gives the school its unique identity and purpose where academic achievement is foregrounded above the ideas of inclusive education. This became starkly evident when the principal explained: *"I think inclusion is limited here, because of our ethos of extending the top achieving pupils more than helping children with academic challenges."* In this excerpt it is clear that the principal of Riverbend Primary is mandated to support and promote an ethos that does not take into account

inclusive teaching as an outcome of teaching and learning, but rather an ethos focussed on academic achievement. This aligns with the research of Carrington and Robinson (2006), who conclude that where school principals drive academic achievement and standards over successful learning experiences the result is the reinforcement of the deficit perception of learners who are not responding to the demands presented by the curriculum. In other words, the ethos, driven by the principal of Riverbend, is not aligned with the ideas of inclusive teaching. This finding is congruent with the research of Loreman (2007) who explains how a school principal plays a critical role in the design of school and its functions right down to the time allocated for lessons, and the distribution of physical resources to classrooms and the grouping of learners in classrooms. In the case of Riverbend Primary School, the actions of the principal on an operational level reflect the school ethos and is therefore not conducive to inclusive teaching. This has the direct, resultant effect of teachers being unsupported to teach inclusively which ultimately results in a constraint to the traction or advancement of the ideas of inclusive teaching.

At some schools, unlike Riverbend Primary, there exists no distinctive ethos that sets out to marginalise those learners with a range of different learning needs. However, the way in which children were supported in a school and the thinking behind the way children are to be accommodated became the relevant topic of discussion. During the interviews with the principals of Southern Ridge and Park Primary schools it became apparent that they were in favour of support for learners with a range of different learning needs that was based on the ideas of special needs education. This way of thinking, based on the ideas of special needs practices, also formed the basis of the operational procedure of each school's policy. In these instances school policy, supported by the principals, advocated for diagnostic testing of learners who were deemed to be not coping in class - providing these children with labels aligned to medically orientated disorders and the use of specialists as the solution to providing support. The learning support specialists would operate separately to the school planner and learners would be removed from lessons for support or have to attend various therapies after school hours. This was evident when the principal of Southern Ridge was asked about his strategy for supporting learners with different learning needs in his school. He responded: "*When kids are identified with learning problems or with certain difficulties or barriers they're referred for assessments. It's on the parent's onus for them to then take the kid to a psychologist or an educational psychologist for assessment."* This extract clearly shows that the principal does not expect teachers to focus their attention on learners who cannot cope in class. Rather,

the responsibility for the learner's education and support is purposively transferred to the parents and specialist providers away from the school. This comment also provides insight into how the principal thinks about learning support. It is apparent that he has a special-needs way of thinking about how to support learners in his school. In another example the principal of Boulder Primary School describes how, in his opinion, the teachers are resistant to any change in how to teach to learners with a range of different learning needs, as he believes that ideas of how to approach learning differences is entrenched. He says: *"[inclusive teaching] would be a valuable commodity…at the moment it isn't practiced. Ja, the main thing that people [teachers] dwell on is the ordinary learners."* Although he mentions (previously discussed) that he has no leadership strategy or policy in place to drive the ideas of inclusive teaching, he places the blame for a lack of inclusive teaching taking place on the teachers, who he singles out as only being concerned with what he describes as the 'ordinary' child. This comment by the principal shows how entrenched the ideas of bell-curve thinking (Florian, 2015) are at the school.

This affinity for special needs thinking that influences leadership decisions and ultimately the school's ethos constrains inclusive teaching. This finding is reflective of many school scenarios across South Africa, as has already been indicated in the literature, where Walton, Nel, Hugo and Muller (2009) explain how leaders in many independent schools in South Africa often rely on a 'pull out' system where learners are withdrawn from class to receive specialist therapy from the relevant learning support specialist available.

In the interviews most of the principals did not really consider promoting the ideas of inclusive teaching in their school systems. In their opinion there were other school related issues that were either operational or strategic that demanded their attention. As a result of this the ideas of classroom practice were not really a priority of their agenda. Principals commented on the fact that despite them having an awareness of the need to address the challenge of designing management plans that promoted teachers to focus on their pedagogical approach in the classroom little had been done on this account. The majority of the principals spoke about how they had been aware of the need to foreground classroom instructional practice on their leadership agendas for many years, but had done nothing to address this need. This was evident when the principal of Southern Ridge said: *I don't think we have done anything really to be honest with you. In the four years that I've been here – this is my fourth year – um, not really. We haven't had any real training."* His tone was almost apologetic and he felt a sense of personal failure in neglecting ideas of how teachers could develop their instructional practice. He had thought about giving teachers' pedagogical approaches a platform in is school for four

years and but has made no progress in this respect. This is a point of shame for him. His apathy towards developing the instructional practices of teachers has influenced his entire management team. This was evident when he commented on the limited efforts his management team had made to taking responsibility for addressing the different needs of learners when he commented: *"We do very little to accommodate kids. Anyway, it's quite embarrassing…Um, we, we don't really have a management plan itself."* As the school leader he is directly responsible for and influential in making an idea a reality. The principal's management team's failure to promote teacher development can be directly attributed to his vision and leadership. The school leader is instrumental in determining the extent to which the ideas of inclusive teaching practice find traction (Nel, Tlale, Engelbrecht & Nel 2016; Walton, 2011; Gous, Eloff & Moen, 2014).

The apathy shown by school leaders to promote the ideas of inclusive teaching was a source of considerable frustration for the majority of the teachers at the schools. The findings have shown that the management plans for teaching children with different learning needs and the challenge of responding to these difficulties is not a leadership priority. This reinforces what Geldenhuys and Oosthuizen (2015) concluded from their research findings that insufficient contributions by school management to teacher education negatively affected the quality of teaching. At all four schools the principals had nothing to comment on in the interviews when it came to any formal leadership decision that had led to the creation of a structure or policy for inclusive education. Nor had any staff management system been initiated by them to promote inclusive teaching. This is reflected in the comment made by the principal of Southern Ridge Primary when he said:

> *Most of the teachers [Head of Departments] doing the reviews [formal yearly appraisals for teachers] don't even answer that section [section asks about learner accommodation]. So, I couldn't even report on that, you know. We do ask questions about it [learner support] but I don't think there is much happening there.*

This statement highlights the low level of priority given to inclusive teaching at Southern Ridge Primary. On the official appraisal documentation there is a feedback section that could be an applicable place for the teacher to comment on their inclusive teaching. However, it is ignored by the management member conducting the teacher appraisal and is not even reported on for statistical and analytical purposes. This reinforces the opinion of the teacher concerned on how low a priority inclusive teaching is given at the school and how inconsequential it is in regard to his/her overall performance in his/her role as an educator.

7.5.2 Availability of human resources

Engelbrecht (2004, p. 24) argues that health specialists can work alongside teachers and become 'collaborators' who consult with teachers and support them in the classroom. To achieve this Engelbrecht (2004, p. 27) believes that learning support specialists would have to provide their specialised skills in a variety of contexts that would include the "classroom, school and community environments." Many teachers from the four separate schools in this study felt that they are not supported with adequate staffing or human resources to assist them with the issue of supporting children with a range of learning needs and meeting the challenge of responding to these differences. The majority of the teachers felt that without the human support being provided by management their efforts to teach inclusively were futile and inadequate in making a difference in the lives of the children and their learning. The teachers were of the opinion that human resources support could assist with a broad range of different needs that they were presented with in diverse communities and that went beyond the traditional scope of the issues being mostly related to in classroom learning. For example, teachers felt that one of the challenges they faced were the social issues that learners brought to school from their home environment. They were of the opinion that if the emotional needs of learners were unattended to it could constrain their ability to learn. This was evident when Charlene from Park Primary said: *"Social issues. And we have them [children], even though we have counsellors here, it's not enough to make a huge difference in some of the children's lives."* Charlene believes that there is a great need for human resources to support the social issues that her children in her class are faced with. Although there is some effort made by the governments' social department to supply some counselling it is far from regular and in her view insufficient.

In this case Charlene's interview comments are corroborated by the principal of Park Primary when he said:

> *I would say we need an occupational therapist, we would need a psychologist, remedial therapists – I would say at least two to three remedial specialists within the school because we have a relatively high percentage of children with learning disabilities.*

What the principal claims is that the school is not coping with the challenges of teaching learners with different learning needs. He argues that human resource support is needed to assist teachers in addressing these teaching and learning challenges. It is necessary to mention that the findings did show that the management of Park Primary School regarded learning support from a special needs perspective and when it felt that the government was failing to

deliver on the provision of support it did complain about this. Scholars (Engelbrecht, Nel, Smit, & van Deventer, 2016) noted that traditionally the domain of educational specialist services subscribe to a medical model of thinking. I argue that school personnel who call for more of these services to be provided by external entities see learner support provision framed from a special needs set of ideas.

In some instances in this study criticism was not levelled at the lack of specialist support but at the fact that schools were understaffed with regular class teachers as a result of a lack of money to pay their salaries. Some teachers felt that their schools lacked sufficient classroom teachers to teach the children. Olive at Boulder Primary complains about her school being understaffed. This resulted in her having had to incorporate her class with the classes of teachers no longer in the employment of the school but who had not been replaced. This was evident when Olive said, *"He was in Mama Paula's class so because we were short of teachers we had to combine them."* Olive blamed school leadership for this predicament. She was of the opinion that the untenable situation of having to combine classes was a result of management not bothering to employ more teaching staff and the remaining teachers having to devise their own ways of addressing the problem. This was reiterated by Lydia who said: "*Not really, Nothing. You yourself you just have to devise means of helping them [learners], the school doesn't help at all."* This is congruent with what scholars (Kenworthy & Whittaker, 2000; Soudien & Sayed, 2004; Wildeman & Nomdo, 2007) argue that a lack of human and material resources in schools constrains inclusive teaching.

Under-resourced teaching environments take a negative toll on the morale of teachers and impacts negatively on their attitude towards teaching inclusively. Scholars (Kenworthy & Whittaker, 2000; Soudin & Sayed, 2004; Wildeman & Nomdo, 2007) argue that the reasons for teacher negativity and the resultant low morale towards inclusive teaching were attributed to the lack of institutional support and through the lack of availability of human and material resources. Many of the teachers at three of the schools mentioned in this study felt that the job of meeting the challenge of responding to the different learning needs of the children, when resource support was limited, affected their ability to teach inclusively. This was evident when Helen from Southern Ridge Primary said:

> *When your job is becoming so much more difficult and you feel like you're not supported in doing that, it becomes almost impossible and just support for teachers, because emotionally it's very draining when you're trying to deal with, you know, one to ten, whatever, kids who are really struggling.*

Helen made it clear that she felt overwhelmed by the lack of resources at her disposal. She spoke about how she felt emotionally drained by having to try to teach children who are not coping in class. Helen felt despondent and fearful for the future of the learners in her class who she believed she could not assist and attributed this to of the lack of resources made available to her at the school. These findings are congruent with what scholars (Swart et al., 2002; Mashiya, 1998) conclude where they are concerned about the negative long term effects of a lack of teacher support and a lack of resources on learners and teachers.

In many cases the emotional toll on teachers to teach inclusively, when faced by under-resourcing issues, does not go unnoticed by the school principals who attribute the lack of staffing resources to issues that include the school's budget as a result of poor fee collection. This was evident in this excerpt from the principal of Southern Ridge Primary School:

> *I think the biggest challenge is cost, the money. So, if you have got low fees, um, you don't have surplus cash then you are loath to spend it on additional staff. And I think you need additional staff if you are going to offer very good support and an inclusive school.*

The principal intimates that he is constrained by a lack of funding necessary to operate the school to its full potential. He feels that the limited monetary resources he does have must go to other priorities in line with the ethos and historical motives (*"…loath to spend on additional staff…"*). The principal acknowledges that inclusive teaching is constrained by a human resource shortage. However, inclusive education is not a primary objective of the school. He confirms that belief in the extract below when he comments on how support for children who struggle to cope in the lessons as a result of their different needs should have these needs externally provided for by the children's parents: *"The parents, it's on the parent's onus for them to take the kid to a psychologist."* A lack of funding for resources was also reported in the interview with the principal of Boulder Primary - a school that is totally reliant on state provisions as there is no fee base at all. He commented:

> *Immediately after the new government came things just collapsed because I am sure now the focus has changed. Now the resources have dried up and people are no longer willing to assist.*

The Principal feels that he is unsupported by the new government that was democratically elected after apartheid. He is of the opinion that the current education department does not focus on the resource limitations he faces at a grassroots level. When Lydia from Boulder Primary was asked about training offered for inclusive education she answered: *"Not really, nothing"* In the literature (Jansen, 1998) concerns were raised that there was a need to

implement policy and legislation in order to repair the damage created by the apartheid government. Muthukrishna et al. (2002) explained that this process would establish a sense of hope for learners who were vulnerable to marginalisation and exclusion. However, the findings discussed here from my experience of speaking to the principal of Boulder Primary School show that the ideas and promises at a macro level have not been expressed at a micro-level within schooling systems.

In three of the four schools there was a shortage of resources that the findings showed constrained inclusive teaching. However, the data shows that in some cases it was not the unavailability of resources that constrained teachers from teaching inclusively but the allocation of the available resources that was the constraining issue.

Issues with how resources were allocated within schools

In some cases, there were no budgetary constraints towards human resources in the schools. Rather, it was the alignment of the ethos of the school to a certain way of thinking about how to respond to the challenge of teaching children with different learning needs that was the pertinent issue. At Riverbend Primary the teachers explained how there was no limit on the availability of resources at the school. However, there were certain directives that governed how these resources were allocated. This was evident when Brenda said:

> *There's a whole accelerated learning centre which just sort of shows the support and there are dedicated teachers here not doing it just in spare time, but it is their job. Um also just in terms of um who's employed, there's also an educational psychologist who can help with those issues and they are full time members of staff on campus. They will find a way to work it around the child's timetable and are very supportive of it.*

Brenda explains that the resources for supporting learners with a range of different learning needs are available at the school. However, the funding was directed towards the establishment of a separate learning centre that was staffed with full time support specialists. The idea was that these specialists would be available to provide support for learners outside of the classroom if teachers requested them - even to the extent that a child will receive an individualised timetable to factor in when they are out of class with a specialist. What this shows is that it is not necessarily a lack of resources that can constrain inclusive teaching but also how these resources are allocated within the school. I conclude that the situation regarding the allocation of specialist services at Riverbend being a constraint to inclusive teaching is congruent with what scholars (Engelbrecht, 2004; De Jong, 2000; Lomofsky & Lazarus, 2001; Muthukrishna & Schoeman, 2000; Donald & Hlongwane, 1993; Hay, 2003; Pillay & Terlizzi, 2009) argue

when they say that learning-support-specialists must transform their methodological approaches in order to stay relevant and make a positive contribution to inclusive education.

7.6 Conclusion

This discussion of the data showed that there were a number of factors in schools that constrained teachers from teaching inclusively. First, the nationally prescribed and directed CAPS curriculum was found to be unsuitable for use in a classroom where teachers attempt to teach inclusively. It was found that the pace, content and assessment requirements of the curriculum did not take into account the challenges of the inclusive classroom. It was thus overtly cumbersome, too one dimensional and disconnected from the reality of a diverse classroom to be an affordance to inclusive teaching. Secondly, the findings showed that teachers' pre-service education was inadequate, and thus a constraint to them in their efforts to teach inclusively. Issues of duration of the pre-service courses, the content taught, an alignment to a special-needs way of thinking and a lack of priority given to the topic of inclusive teaching were all cited as contributing factors to the pre-service courses' ineffectiveness. This resulted in teachers being underprepared for the challenges of teaching to learners with a wide range of different learning needs. Thirdly, the influence of school leadership was found to play a profound and critically decisive role in implementing inclusive thinking and inclusive teaching at the schools. For example, it was found that where principals and the leadership structures were found to be unsupportive of inclusion, they directed resources elsewhere, or created a special-needs culture indicative of a medical model of conceptualising learner difference. Inclusive teaching was thus constrained. Also, where fundamental human and material resources were found to be lacking in a school, either for budgetary reasons, apathy, or a school ethos that was not supportive of the ideas of inclusive education, systemic inclusive practice was constrained. Finally, the data showed that in all the schools, there were instances where inclusive teaching took place. This was attributed to teachers collaborating with peers and when they took action in their individual capacity to explore how better to include all learners with a range of different learning needs in the lesson process. In the next chapter I take these findings and consider them through the lens of Engeström's (2000a) second generation activity system and examine how the constraints identified in Chapter Seven create systemic contradictions within a school system. I also show that where these contradictions are unresolved or un-transformed inclusive education fails to gain traction.

CHAPTER 8

AFFORDANCES AND CONSTRAINTS TO TEACHING INCLUSIVELY FROM A SYSTEMS PERSPECTIVE

8.1 INTRODUCTION

In Chapter Eight, the findings explored in the qualitative data analysis are considered through the lens of the theoretical framework of CHAT. From a CHAT perspective schools can be considered to be complex systems where the actions or circumstances that exist within or between components in the system have an impact on the object of activity of the system. These impacts can result in a cascade of consequences that go unnoticed when data is analysed in isolation from the other elements or components in the system. Also, the actions of other systems within the fabric of society can create tensions within the system under investigation which adds a further dimension that needs consideration.

Chapter Eight is the second component of this research process and can be considered to be a deductive process within an abductive (Oswald, 2010) process. According to scholars (Foley, 2002; Oswald, 2010) an abductive data analysis process constitutes a continuous movement between an inductive and a deductive method with the intention of creating new knowledge. What makes the second component deductive is that Engeström's (2001) second and third generation activity systems models were employed to lend structure and act as a lens to the themes that emerged from the qualitative data analysis. Through the deductive process the themes were interpreted from the viewpoint of the predetermined components of Engeström's (2000a; 2001) second and third generation activity systems triangles.

Engeström's (1999; 2000a; 2001) activity systems models/triangles provided the structured frameworks that represented the components of a complex system through which the qualitative findings could be examined. The complex systems are the four schools selected for this study. Interpreting data through the lens of activity systems models allowed me to consider how findings about one component in the system directly influences other components. In some cases, tensions are the resultant cause of this influence and have a transformational impact on the entire system and its ability to achieve its outcomes. I argue that examining these tensions is only possible by examining findings within the context of the complex system from which they originated. For example, findings related to the division of labour component

(management) cannot be examined in isolation, as they have an impact on the subject (teachers) component. In order to further make sense of the findings discussed in Chapter Seven, I considered the data through the lens of the five basic principles of CHAT. Furthermore, I utilised the theoretical tools of 'relational agency' and 'relational engagement' as another analytical lens to interpret the findings (Edwards, 2007).

Figure 4

Figure 4 represents the contradictions/tensions discussed in this chapter, where the teachers positioned as the *subject* component, as the focal point of the study, engage in the productive and shared *activity* of teaching within the school system. Figure 4 shows how shared activity (collective actions of teaching) is influenced by other components of the activity system, most notably the *division of labour*, the *community, rules* and *tools/artefacts*. In the Engeström (2001) *triangle* of the activity systems model the upper section represents the *subject* and the *object* orientated, *tool/artefact* mediated relationship of individual and group action associated with production. However, in the expanded model of Engeström's (2001) second-generation activity systems triangle the lower quadrants represent the larger cultural and historical context that has, over time, continuously contributed contradictions and sometimes transformations to the *subject-object* relationship of the system (see Figure 4). All the *activity* taking place within a school system is generally focussed on the learners' education success as the eventual outcome.

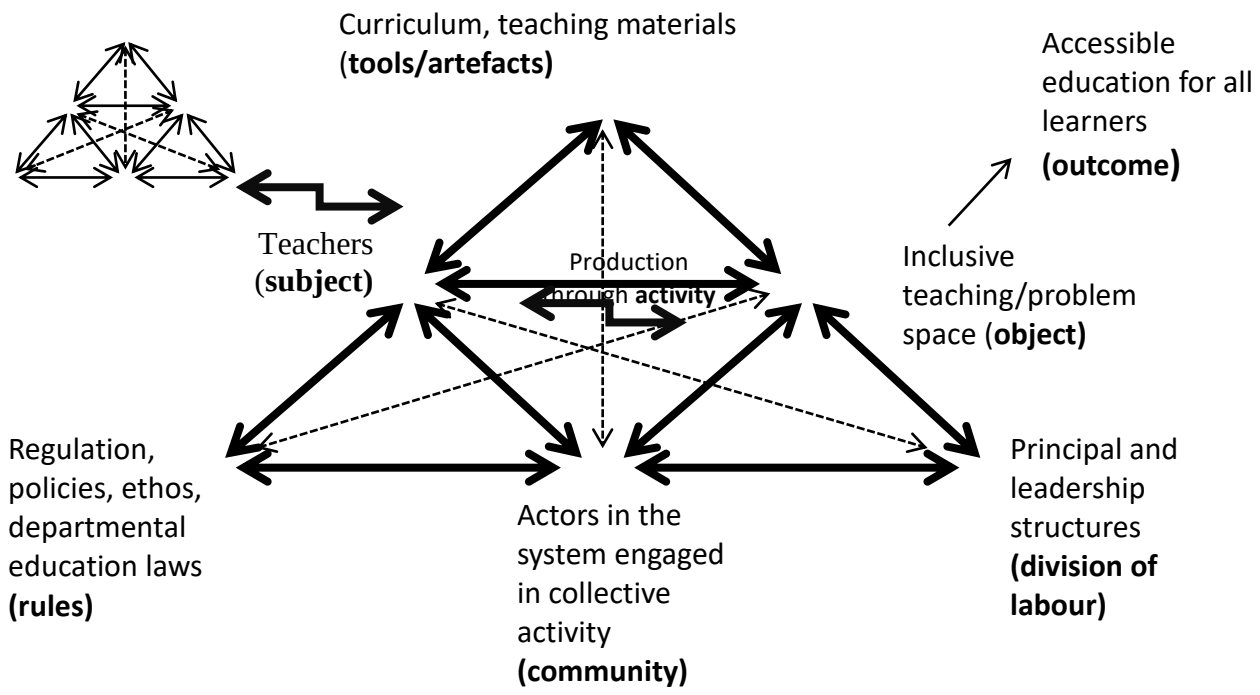


Figure 4: The school as an activity system with the teacher as the subject component (adapted from Engeström 2001)

In the discussions that follow the findings are clustered in a deductive manner. This is according to how the emergent themes from Chapter Seven fit with the predetermined focal points related to inter and intra relationships between the components of the activity system as depicted in Figure 4. These focal points correlate with the interrelations between components in the activity systems triangles. The focal points are outlined below. These discussions are designed to give the reader an idea of how contradictions within or between components create tensions that impact on the system. Also considered in this discussion is how members of a component, the teaching *community* for example, can interact to possibly transform the existing *object* that exists in the complex and dynamic system.

It is important to consider that the intentional act of synthesising my findings with the structural components of the Activity Systems Models is to identify the root causes or the basic historically motivated reasons as to what influences inclusive teaching in schools. By invoking Barab and Squire's (2004) *activity-settings* method to 'zoom in' on components a researcher can isolate findings that are specifically pertinent to one or two elements of an activity system. This allows that researcher to systemically consider the constellation of interactions and relationships between the multiple components of the schools that exist as a complex system.

Focal point one: The existence of the primary contradiction and how it constrains inclusive teaching in school systems.

Focal point two: Secondary contradictions between the subjects (teachers) component and the rules components within the activity systems (schools).

Focal point three: Primary and secondary contradictions that emerge between the teacher (subject) and the division of labour (management decisions) within the activity systems.

Focal point four: Secondary Contradictions between the subject (teachers) component and the tools/artefacts component in the school system.

Focal point five: Expanded contradictions that exist between the subject component (teachers) in the schools and other activity systems in society that have a vested interest in schools (teacher education institutions/universities).

Focal point six: Relational agency and relational engagement and the principle of the multi-voicedness nature of activity systems: considering this impact on subjects (teachers) and the community of teachers who share an intended object of activity (inclusive teaching).

8.2 Focal point one

The existence of the primary contradiction and how it constrains inclusive teaching in the school systems.

To gain a perspective on the primary contradiction in a particular complex system I refer to the third basic principle of CHAT, that states how the problems within a system can only be understood against its own history. To understand the tensions that exist within a system it is important to examine the multitude of historical layers that informed the motives for its past history and to refer to the systems contingent conditions of emergence (Laclau, 1990; Engeström, 2000a). Engeström (2001) refers to the historicity of a system as the 'sedimentary layers' that are oftentimes concealed from view when observing a system in its present or current state.

In Chapter Four of this thesis Foot and Groleau (2011) describe the origins of the *primary contradiction* that exist in complex systems as the dilemmas that exist within each of the components of the activity system triangle. The findings from this study indicate that there is evidence of the *primary contradiction* existing within all components of the four schools from this study. I considered the tensions that are internal or intrinsic to the teachers in relation to

their desire to teach inclusively and the rules of society. To focus on the intrinsic motivation of individual teachers Rogoff's (2008) *personal plane* of CHAT enquiry was employed to focus on the teachers' individual motives and needs as they operate within the schools as complex systems. The findings in Chapter Seven showed that the majority of the teachers were motivated and committed to teach with the best intentions of making a difference in the lives of the children they taught. The respondents envisioned their teaching role as a calling that went beyond being merely a job It was shown that they were passionate about discovering and implementing educational solutions for all the children in their care. However, from a CHAT perspective, the teachers' desires to teach inclusively created an internal tension or contradiction within themselves. This internal contradiction was attributed to the *primary contradiction*. The *primary contradiction* in this case can be defined as the tension between 'meeting the challenge of teaching to a range of different learning needs' versus the challenges created and imposed by society with its multiple inequalities. The market driven society in which teachers practice dictates that they have an intrinsic need to survive, and thus have to be compliant to the directives of the *rules* and the instructions and direction of the *division of labour* in order to maintain their employment.

Within, or internal to the *subject* (teacher) the *primary contradiction* of dichotomous tension emerges as a result of the demands made by society and its imposed rules. With the denotation of a vertical bar (Schaffer stroke) this is represented as *societal expectations/limitations of how learners should be taught | meeting the challenge of teaching to all children with a range of different learning needs.* The vertical bar symbolises the dialectical category constructed of two mutually exclusive, reciprocal terms. The findings showed that this internal contradiction was manifested within the *subject* (the teachers) at all the four schools and that this *primary contradiction* is echoed throughout each school system.

This tension/contradiction created by leadership-imposed teaching practice from the *division of labour* and externally imposed directives imposed by the *rules*, versus the teacher's efforts to teach to all learners by responding to a range of different learning needs results in critical choices around how to teach that are directly modified by the pressures of conformity (Roth & Lee, 2007). This contradiction within the teachers could be denoted as: the teacher with an internal motivation to teach inclusively | employer/school leadership and rules directed teacher practice in accordance with societal dictated constraints. The activity system's *division of labour* and the *rules* that dictate the intended method of teaching assign the conflicting *objects*

of shared *activity* to the teacher. This creates a tension that is internal to the teacher, as it is at odds with their ideas of how to teach and why they pursued teaching to begin with.

A dialectical contradiction emerged where teachers were employed to be teachers and to teach in accordance with how they envisioned teaching to be, while simultaneously subscribing to the schools' ethos or set of directives of the *division of labour* that do not prioritise inclusive teaching and ideas in how to teach learners with different learning needs. The findings showed that this tension is as a result of inclusive teaching, as an intended *object,* not satisfying the requirements of the broader society who have an influence on how the school must function. For example, at Riverbend Primary School the ethos of the school was specifically orientated to prepare learners to be academically competitive with one another and to strive for academic excellence to best suit a market driven economy and university admission requirements. The findings showed that this was also an historically motivated decision originating with the genesis of the initial need for the school's existence. This was evident when the principal of Riverbend Primary said: *"I think its limited because of our ethos…of actually extending the top pupils more than helping children who have academic challenges…that's our product."* This finding of dialectical entities existing within teachers aligns with the research of scholars Roth and Lee (2007) who describe how components within an activity system are 'dialectical entities', where mutually exclusive but reciprocal elements are combined together. Roth and Lee (2007) explain how the concept of dialectics explains how elements in systems can have built in contradictions.

According to the fifth basic principle of CHAT, that of historicity, the motives that create tension in systems are historically created. Artefact (2015, p. 3) argues that the "primary contradiction pervades all elements of our activity systems" and never resolved; it just re-emerges differently in different contexts. For example, the findings showed that the teachers at Riverbend Primary School encountered resistance to the ideas of inclusive teaching because the demands of the parents who support the school economically do not consider inclusive education as a priority. Instead, parents insist on the classroom functioning a competitive academic environment that subscribes to ideas of bell-curve thinking. This creates a tension/contradiction between the underlying motivation for the teachers to teach in accordance with their own sense of social justice and the economic realities imposed on systems and the *actors* who operate in these systems.

The contradictions between the *subject* (teacher) and the *object* in the school system at Riverbend Primary can be seen in Figure 5 where the teacher has the will or desire to teach inclusively, however, the *object* of the school is that of competitive academic teaching. This has the result in an unresolved tension.

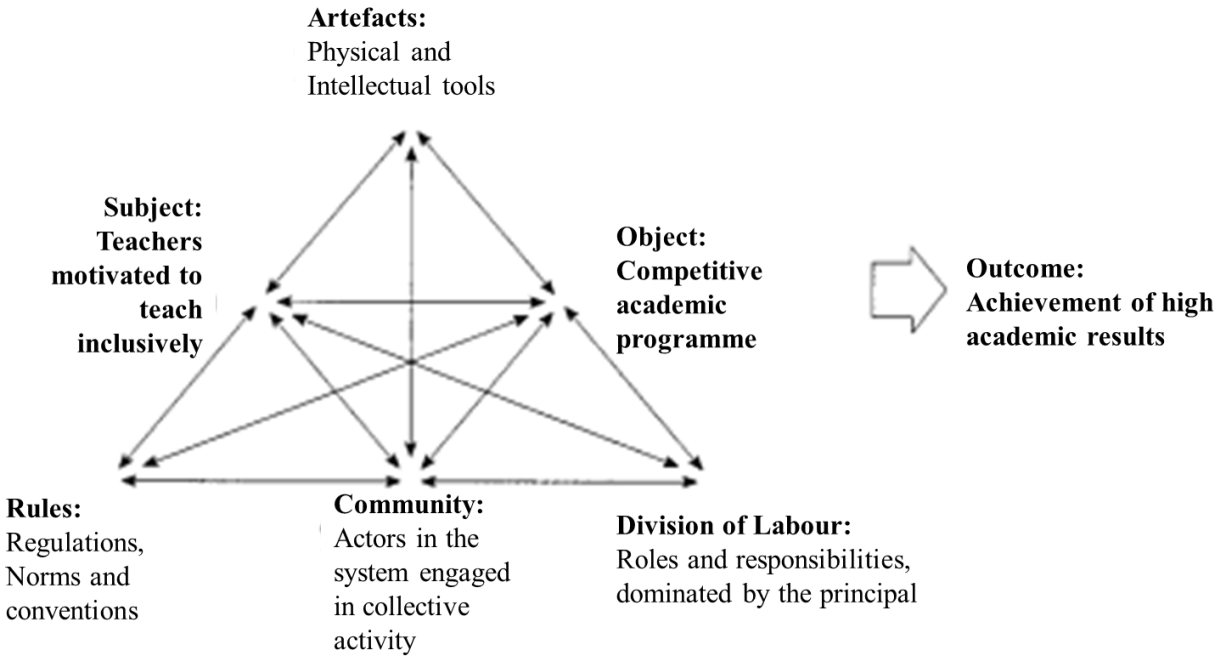


Figure 5: Activity system model showing the primary contradiction within teachers versus the object of the school (adapted from Engeström, 2001)

The *primary contradiction* was also evident in different contexts at the other research sites. For example, at Boulder Primary School, it was reported by the teachers and the principal that no additional funding was available to the school for staffing requirements and the provision of physical resources. Also, when teachers resigned their post a replacement teacher was not appointed. Instead, existing staff members picked up the additional teaching load. This had the net result of teachers feeling emotionally and physically exhausted. This resulted in them being unable to fulfil their internal desire of teaching inclusively and meeting the challenge of teaching learners with a broad range of different learning needs. This was illustrated by Olive when she said: *"Most of the time I go home I'm so tired."* The challenging socio-economic circumstances that exist in South African society have an impact on the motives behind the *object of activity,* where the primary motive of the school leadership is rooted in the function

and pragmatics of ‘coping with adverse challenges that present in the school day.’ This reflects the original and ever-present *primary contradiction* where providing education to teach for teaching’s sake is overwhelmed by powerful economic constraints that impact negatively on the schools’ running costs in circumstances where the availability of the necessary funding for human and physical resources is scarce or non-existent. This becomes a 'vertical problem' (Stetsenko, 2005) that impacts the entire activity system and is reflected in and by the school community.

8.3 Focal point two

Secondary contradictions between the subjects (teachers) component and the rules components within the activity systems (schools)

In focal point two I invoke Barab and Squire's (2004) *activity-settings* to ‘zoom in’ and to isolate data that is pertinent to the interactive connectedness between one or two components that exist in an activity system. This section then focuses on the secondary contradictions that emerge between the *subject* (teacher) and the *rules* component that govern or direct what teachers teach and how teachers go about the shared *activity* of teaching learners within the context of their school as a complex system.

In Chapter Seven, all the participant teachers reported that the externally prescribed national curriculum (CAPS) was a constraint that limited them from teaching inclusively. From a CHAT perspective, it can be argued that a *secondary contradiction* exists between the teachers (subject) and the dictates of the prescribed curriculum (rules) components. This contradiction or tension is created by the externally prescribed and content-driven CAPS curriculum imposed as the intended *object of activity* for the goals of education, versus inclusive instructional practice, which intends to allow all learners to access the activities and content of the lessons. Represented with a vertical bar (Schaffer stroke), this contradiction exists between: content driven curriculum | inclusive instructional practice. Also, as the *rules* prescribe the curriculum, with the accompanying prescribed content and assessment measures in the syllabus and lesson planning documentation, these then constitute the mediating *artefacts* component intended for use in the *object orientated artefact mediated activity* described as the first basic principle of CHAT (Engeström, 2000a).

The curriculum directives, which inform the *rules* and *artefacts* components of the school system, create tension and inhibit or constrain the teacher operating in their classroom from transforming the *object of activity* to a newer and different *object* - that of inclusive teaching.

The findings show how the teachers felt that the content they were expected to cover in the prescribed curriculum, the volume of subject content, the prescriptive and unrealistic timeframes and the externally prescribed assessment materials/tools that are not differentiated to meet the challenge of teaching learners with a range of different learning needs create this tension. This state of dialectic tension resulted in an unresolved secondary contradiction between the *rules* component and the *subject* component within the four school systems. Identifying the existence of the secondary contradiction in the school systems allowed me to consider the historical influences from other systems existing within the fabric of society that have a vested interest in the *rules* component of the four separate schools of this study.

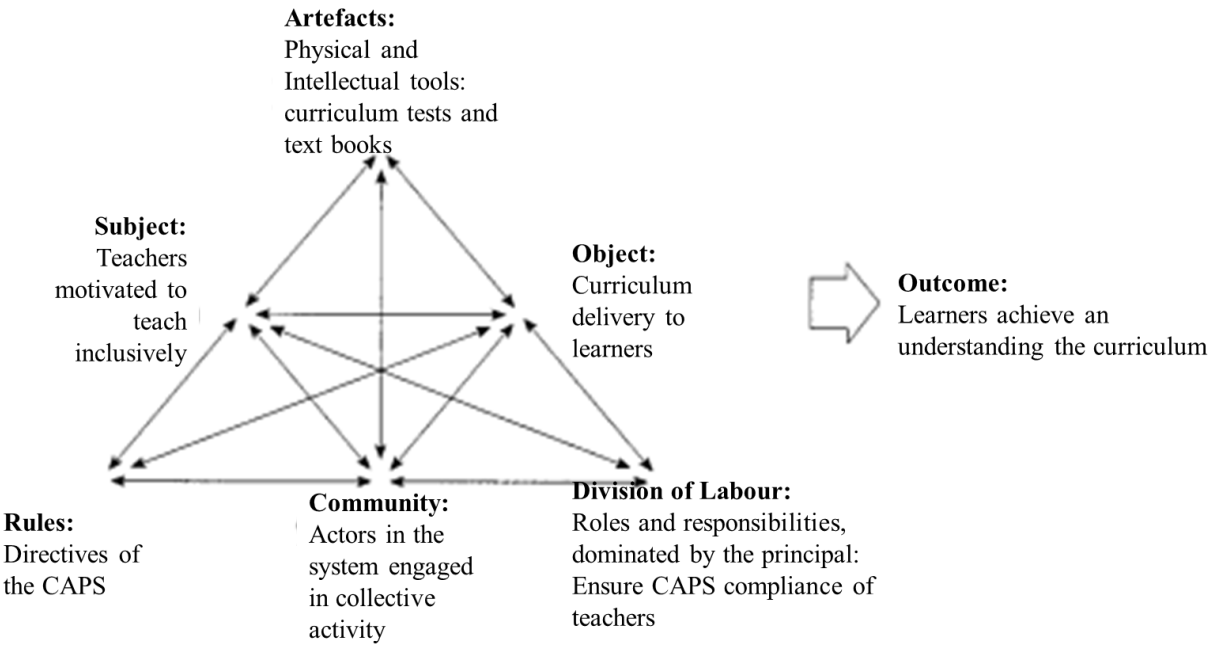
To understand the historical motives behind the prescriptive design of the CAPS curriculum it is necessary to consider the third basic principle of CHAT - that of the acknowledgement of the *historicity* of an activity system or the many systems that make up human society (Engeström, 2001). Within the historical context of the emergence of education curricula in South Africa, one previous curriculum that came into existence in the newly formed democracy, called Outcomes Based Education, was deemed unsuccessful and was criticised in the literature (Jansen, 1998). Subsequently, there was a development of a more regulated and prescriptive curriculum to be implemented in the school system (Shalem & Pendlebury, 2010). This historically motivated need that led to the creation of the more structured and prescriptive CAPS curriculum informed the *object-of-activity* at the schools. The CAPS directed *object of activity* for schools is in contradiction to the newer motive of inclusive teaching. This dialectical tension is represented as: inclusive teaching practice | CAPS directed practice. Therefore, a vertical tension constrains teacher participants across all four schools from implementing inclusive instructional practices. In the micro-system of the school context it is apparent that the contradiction exists between the *rules* component (curriculum directives) and the subject component (teachers' motivation to teach inclusively). In the macro-system it is the *rules* component of the schools that are influenced by other systems (DoE) in society.

Kaptelinin (2005) describes how the motives behind the *object of activity* must be aligned or else shared *activity* in a system cannot begin. Kaptelinin's finding raises questions around the *multiple voices* (third basic principle of CHAT) that exist within a system and the extent to which the achievement of the goals of the *object of activity* are related to overcoming tensions emerging from *secondary contradictions*. These multiple voices include teacher's ideas that contradict those of the *rules* directives. Scholars (Engeström, 2001; Kaptelinin, 2005) explain how contradictions between components in systems should ultimately lead to evolution and

transformation of the object-of-activity. Evolution and transformation were not evident in the findings that represented activity at the four separate schools in my study.

In Figure 6 below the *secondary contradiction* is evident in the activity systems model between the teacher (subject) who is motivated to meet the challenge of teaching learners with a wide range of learning needs and the *rules* and *artefacts* components that direct conformity through the dictates and subsequent practices imposed by the CAPS curriculum. The model also shows how the *object* is orientated on the delivery of the prescribed curriculum.

Figure 6: Activity system model showing contradiction between the subject component and the rules component (adapted from Engeström, 2001)



8.4 Focal point three

8.4.1 Primary and secondary contradictions that emerge between the teacher (subject) and the division of labour (management decisions) within the activity systems

To focus the enquiry, I employed Rogoff's (2008) Planes of CHAT Analysis and more specifically, the *interpersonal plane*, to examine the relationships between components in the school systems. In this instance, I examined the interpersonal interactions that took place between the teacher participants and the school leadership. The findings show that tensions exist between the school leadership, with their indifferent attitudes towards supporting the

implementation of the ideas of inclusive teaching and the teachers who tried to meet the challenges associated with teaching to children with a range of different learning needs. This was evident in the theme identified as *Management/leadership support in schools for inclusive teaching*. From an activity systems model perspective these findings show evidence of a secondary contradiction (Engeström, 2000a) existing between the teachers as the *subject* and the principals who are central role players of the *division of labour* component.

Unlike the similarities between the contradictions found between other components and the teachers at their respective schools, the contradictions between the *division of labour* and the *subjects* are significantly different in *motive* at each of the four schools. However, regardless of the contextual differences at each research site, it was found that there was a similar net result in that the *secondary contradictions* constrain inclusive teaching in their unique settings.

What emerged from the findings is that *primary contradictions* linked back to the *historicity* of the system as the root cause of the unresolved issues that constrain teachers' in their efforts to teach inclusively. These primary contradictions can be traced back to the original *need* that informed the *motive* (Katelinin, 2005) behind each school's existence. This in turn becomes the administrative mandate for the school leadership within the school environment. The findings reveal that the contradictions that emerged in the school systems did not result in the necessary disruptions and possible transformations which inevitably lead to a changed *motive* and a subsequent change in the *object of activity*. Because the tension between the principals and the teachers at the schools are influenced by historical factors, as well as reasons intrinsic to the principal himself, I invoked the third basic principle of CHAT, that of historicity, to examine for the hidden 'sediments' (Ellis, 2011) that inform the *object of activity* at each research site.

8.4.2 The emergent contradictions between the subject (teachers) and management (division of labour) at Boulder Primary School

Boulder Primary provides educational services for the most socially and economically challenged community. Boulder Primary was also the most under-resourced and underfunded school of the four research sites. For example, in my researcher's journal, I refer to over-crowding of the classrooms, teacher shortages, crumbling infrastructure, poor sanitation and a lack of teaching materials, text books, ICT, paper, library books and teacher reference materials that were all found to constrain the schools' ability to function on a day-to-day basis. The physical resources that teachers use for teaching can be described as the mediating *artefacts* or

tools that a teacher requires for *activity* towards an *object*. In Chapter Seven, the findings showed that the principal felt that he had not made an effort to promote inclusive teaching in his school and that it was on a *"minimal scale."* This was also reflected in the teacher interviews where the teachers remarked about the lack of support from the school leadership body for inclusive teaching. This was evident when Lydia said: *"The school doesn't help at all."* This tension manifests as the *secondary contradiction* existing between teachers and the school's leadership which is headed up by the principal.

Interestingly, the findings do show that the principal is in favour of the ideas of inclusive teaching. This poses the question as to why he has not had a greater influence in enabling traction for the ideas of inclusive teaching. Although he comments on how he is in favour of the ideas of inclusive education he is disappointed with the fact that he has not been able to make any progress with how teachers teach in the school. The findings from the participants show that there are other pressing concerns around resourcing limitations, a lack of financial support for physical and human resources and availability of departmental initiatives for staff training in order for the school to deliver education to its learner community. Essentially, the realities of the socio-economic challenges this school faces make the principal's motives for the *object of activity* to be more directed or focussed on the school functioning or day-to-day survival and providing a structured education rather than focussing attention on the ideas and practices of inclusive teaching. This vertical tension (Stetsenko, 2005) is reflected by the teachers who indicate that the school leadership directives (division of labour) constrains their ability to teach inclusively. This is as a result of the lack of priority given to the ideas of inclusive teaching. What the findings show is how the *primary contradiction,* that can be found in every society with market-driven economies and which reflects the fundamental tension that exists in every realm of such a society, has led to the creation of the *secondary contradiction* (Foot & Groleau, 2011). The shortages of physical and human resources that Boulder Primary School has to manage with has influenced the way which leadership runs the school. This has directly impacted on the leadership decisions that ultimately contribute to constraining inclusive teaching. This is demonstrated diagrammatically in Figure 7 where the school principal, as the central element of the division of labour component, with a focus on pragmatic functioning of the school over ideas of inclusive teaching, coupled with the limited resources represented by the artefacts component, both constrain teachers from teaching inclusively.

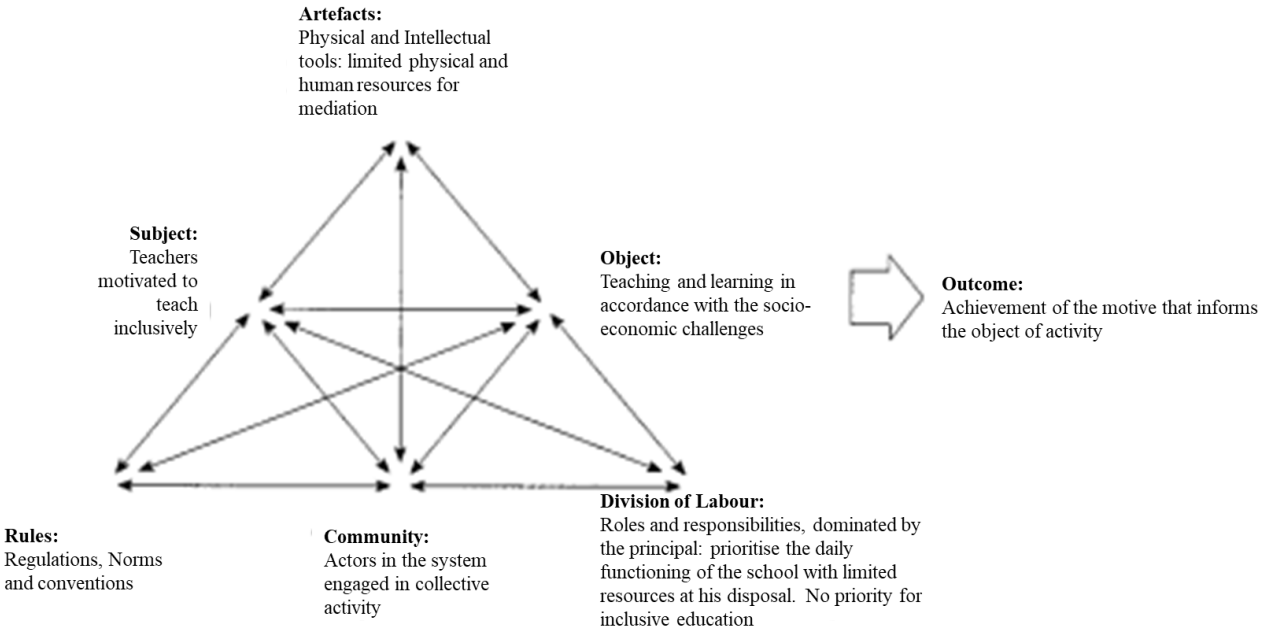


Figure 7: Secondary contradiction between the priorities of the division of labour and the subject component at Boulder Primary School (adapted from Engeström 2001)

8.4.3 The emergent contradictions between the subject (teachers) and management decisions (division of labour) at Riverbend Primary School

The principal and his leadership team at Riverbend Primary School are mandated by the parents and the shareholders to enforce the historical ethos of the school through the *rules* component and the *tools/artefacts* component existing in the system. As the findings show the intended *outcome* of the school ethos is to place academic achievement and competitive learning as the main *object* with the targets of superior grades for learners used to further the reputation of scholastic excellence. One significant historical need that led to the *motive* for the existence of the school was to provide a competitive education to prepare learners for the competition they will encounter in the market driven economy. The principal, who is central to the *division of labour* component, is expected to 'execute the mandate' of his office as directed by the ethos of the school and its controlling affiliates. In the findings, the teachers at Riverbend Primary expressed their frustrations with what they perceived to be a skewed focus on academic achievement and fast-paced teaching as the indicator of success. This means teaching time is limited for core subjects as the timetable includes extension subjects that promote business principles and which are deemed more important for use in a competitive market driven economy. This created a *secondary contradiction* between the teachers' motive in meeting the

challenge of teaching learners with a wide range of different learning needs and the leadership who set managerial directives (division of labour) to be followed by the staff to promote a competitive and academic achievement driven education programme.

Within the case of the whole-school system that *primary contradiction* creates a dichotomy between the desire to provide an accessible education for all and the motive of thriving in a market place that values value exchange where high academic results are an indicator or potential for success and possible opportunity for upward mobility. From a CHAT perspective, the *primary contradiction* within the entire system of Riverbend Primary School is represented by the vertical bar between: Meeting the challenges of teaching to a range of different learning needs | market driven objectives that favour competition and academic success. It can be argued that the result of the existence of the *primary contradiction* and its subsequent expansion into an unresolved *secondary contradiction* existing between the directives of the school's leadership, who drives the school's competitive academic ethos, and any isolated *actions* or robust *activity* over a duration of time constrains the traction of the ideas of inclusive teaching.

It has been explored from the findings how *primary* and *secondary* contradictions have limited the participant teachers at the research sites from implementing inclusive teaching strategies. I have referred to how *historicity* has a role to play in the emergence of these contradictions. The findings show how the historical and local context of Riverbend Primary School has created a systemically conflicted and multiple voiced set of *objects,* that compete for the shared activity of the *subjects* with the desire of achieving multiple goals. From the findings I argue that the *historicity* of the original motive cannot be ignored as the history informed the creation of the *object* of a content focussed academic experience over time and directly created the tension of the secondary contradiction.

The findings, considered through the lens of Engeström's (2001) second generation activity system model, are represented diagrammatically in Figure 8. It can be seen how the historically motivated objectives of the school and the subsequent instructions meted out by the principal, as the representative of the *division of labour,* dictates the activity towards the *object* of competitive academic learning and the allocation of various *artefacts* within the school. This creates tension between the school leadership and the teachers who are willing to try and implement inclusive teaching practices but feel unsupported. This also represents a possible *tertiary contradiction* between the existing *objec*t and a newer, arguably 'more advanced' *object* of inclusive teaching (Engeström, 2000a; 2001).

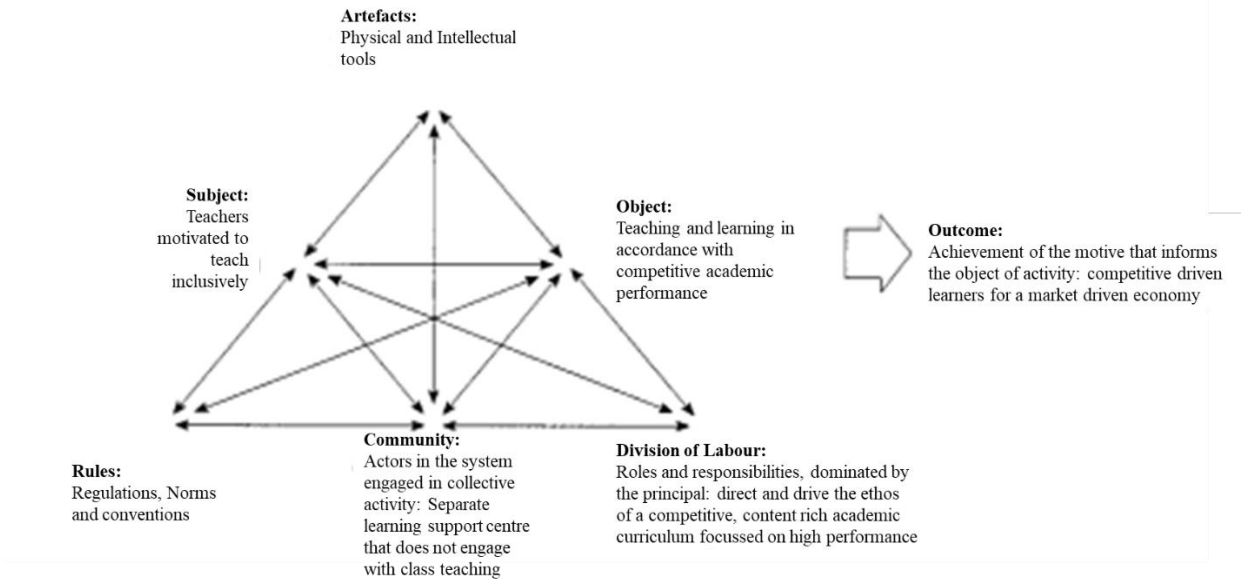


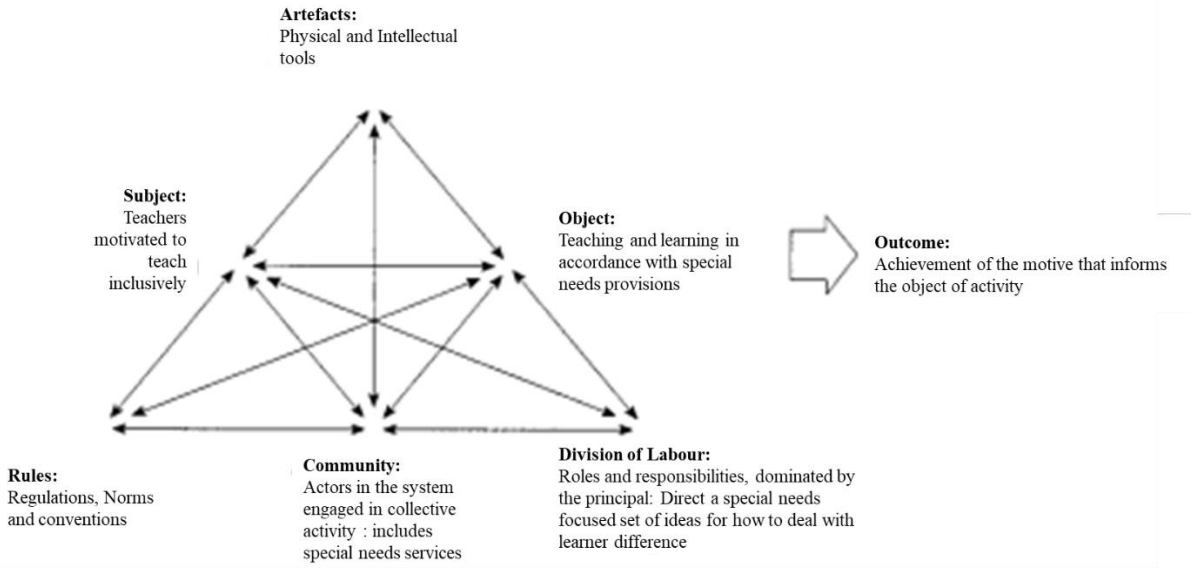
Figure 8: The secondary contradiction between the division of labour and the subject component at Riverbend Primary School (adapted from Engeström, 2001)

8.4.4 The emergent contradictions between the subject (teachers) and management (division of labour) at Southern Ridge Primary School

At Southern Ridge Primary school, the principal explained how a special needs lens inspired by the individual model was considered when learners were found not to be coping with the standard of the classwork. Where children were seen to be not coping in class, the historically motivated attitudes of the leadership, motivated by the individual model towards learner difference, opted for removing learners from classroom teaching rather than meeting the challenge of teaching to a variety of learning needs. This was evident when the principal said: *"It's on the parents' onus for them to take the kid to a psychologist…for assessment."* What this resulted in was that when teachers were confronted with learner difference they were directed by the principal to pursue external assessment for the child in question and seek out additional, separate support provisions. From a CHAT perspective, this tension between the teacher's desires to be an inclusive teacher and the ideas of special needs education that frame the instructions from the school's leadership created the *secondary contradiction*. This *secondary contradiction* can be represented by the Schaffer stroke as: a special needs or individual model response to learners with different learning needs | inclusive teaching response of teaching to all the learners and meeting the challenge of teaching learners with a wide range of different learning needs.

By using activity systems triangles, it was possible to examine the tensions that led to the *secondary contradiction* between the *division of labour* and the *subject* component at Southern Ridge Primary School. At the time of the data collection and findings analysis this contradiction was unresolved. The teachers received no leadership support for any inclusive teaching efforts they attempted in the classroom and were instead encouraged to seek the advice of the available specialists and in some cases suggest to parents that Southern Ridge was not equipped to facilitate their child's education. This unresolved secondary contradiction constrained inclusive teaching. Figure 9 below graphically shows this tension where the *division of labour* is motivated by the ideas of the medical or individual model while most of the teachers are motivated by the ideas of responding to the challenge of teaching learners with a range of different learning needs.

Figure 9: Activity systems model showing tension between the subject component and the division of labour component. (Adapted from Engeström, 2001).



8.5 Focal point four

8.5.1 Secondary contradictions between the subject (teachers) component and the tools/artefacts component in the school system

In this section I consider the relationship between teachers as the *subject* and the *mediated artefacts* that provide the physical and intellectual tools to engage in *actions* (teaching lessons) and ultimately *activity* towards the intended *object*. What emerged from the findings was that when it came to the relationship between the *subject* and the *tools/artefacts*, to engage in *object orientated activity*, the differences in availability and resource allocation across the four schools was different.

At Riverbend Primary School, a fee-paying independent school, the findings showed that the *artefacts/tools* for mediated activity were present, however these did not necessarily assist teachers from teaching inclusively. At Boulder Primary School, a non-fee-paying government school with critical resource limitations and shortages, the *artefact/tools* component was limited, which became a significant inhibitor for teachers being able to teach inclusively. The reason I present findings from these two schools are that they represented the most extreme cases of resource abundance and resource limitations from the schools that participated in the study. In the discussion that follows it is demonstrated that this secondary contradiction exists between the teacher and the available *tools/artefacts* at Riverbend and Boulder Primary Schools respectively. This was done with reference to extracts from teacher interviews to 'zoom in' (Barab & Squire 2004) on the relationship between the *tools/artefacts* and the teachers.

Riverbend Primary

From what I saw in the lesson observations and recorded in the interviews there was no shortage of teaching aids and materials for Brenda and Theresa to use in their teaching. These *mediating artefacts/tools* included a wide variety of text books, interactive-whiteboards, computers, internet access and stationary. There was evidence of the use of these mediated artefacts in all the lessons observed. These were utilised intentionally by Brenda and Theresa to facilitate the inclusion of all learners into the lesson structure. Brenda also mentioned how teaching materials and learning support specialists were available in the school. Also, the management of the school made accessible courses that the teachers felt would be beneficial to enhance their

instructional practice. From one perspective the availability of these human and physical resources within the school can be considered to be an affordance to inclusive education.

CHAT can be used as a framework to capture the multiple voices and histories of a system and in doing so reveal the complexities that exist within the structural elements and the lived experiences of the actors. Gnanadass and Baptiste (2011) argue that as well as being aware of the historicity between components in an activity system it is also necessary for the researcher to understand that the human interactions within a system are filled with multivoicedness and contradictions. The multivoicedness has created tensions that can constrain the *object* or 'problem space' where *activity* is directed. As *activity* in a system is a durable object orientated and mediated collective effort, a multivoiced *motive* can constrain this *activity* if social change is not achieved. Kaptelinin (2005) argues that there has to be one clear *motive* in a system for *activity* to effectively begin. In the case of Riverbend Primary the ideas around the mediating artefacts are multivoiced. The teachers, as one set of actors, are led to believe that human and physical resources are available for use in mediated activity in their teaching. However, the directives from the *division of labour* allocate the use of the majority of these human and physical resources to the learning support centre. The multivoicedness and multiple perspectives around the use of the mediating artefacts are a result of the various different roles played by actors within the school and the greater community. The principal and the parent community are historically of the opinion that human resources must be used in a separate learning support centre away from classroom learning. The teachers, however, are of the opinion that these resources can best be utilised in the classroom space to assist them in their teaching. This was clear when Theresa explained how she had recruited the assistance of a specialist teacher to assist in making a child's classroom learning experience more inclusive, while the directives of the division of labour explained how support should ideally be accessed for learners out of the classroom and in the learning support centre. What this indicates, from a CHAT perspective, is that there is a secondary contradiction between the *artefacts* component and the *subject* component as there is no clear motive that directs the activity. Essentially there is a tension between teachers and the resources available to them, as the resources are intended for use with children out of the class rather than the resources being used in the class. This confusion and multivoiced *motive* leads to tension and constrains *mediated activity* or teaching.

The allocation of resources for learners away from the classroom to a separate learning support centre to support children who cannot be supported in class, supports bell-curve thinking about teaching. Bell-curve thinking was evident at Riverbend Primary School with regard to its

application of human resources to assist learners who are not able to cope with the pace of teaching. It emerged that as a result of the pressure on teachers to deliver a fast-paced, academically-focussed curriculum, the school uses its learner support resources in line with the ideas and practices of bell-curve thinking rather than those of inclusive education. Rather than use the on-site specialists to assist with what Florian and Black-Hawkins (2011) refer to as *whole class teaching*, learners seen to exist on the lower end of the bell-curve were removed from lessons and provided with a range of therapies by learning support specialists in a separate learning-support facility.

Figure 10 demonstrates the contradiction that exists between the *artefacts/tools* component on the upper triangle and the *subject component*. Teachers (subjects) are motivated to teach inclusively however the tools and artefacts, although present, are not readily available for use in the classroom to mediate the activity of inclusive teaching.

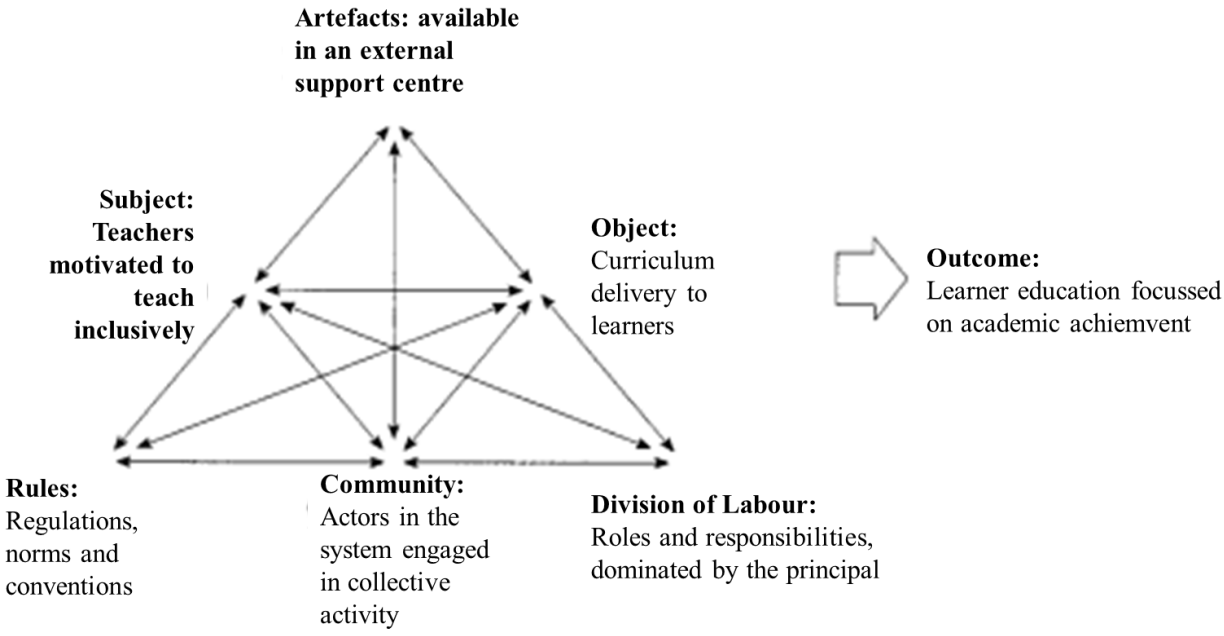


Figure 10: Representation of the tensions that exist between the artefact component and the subject component at Riverbend Primary School (adapted from Engeström, 2001)

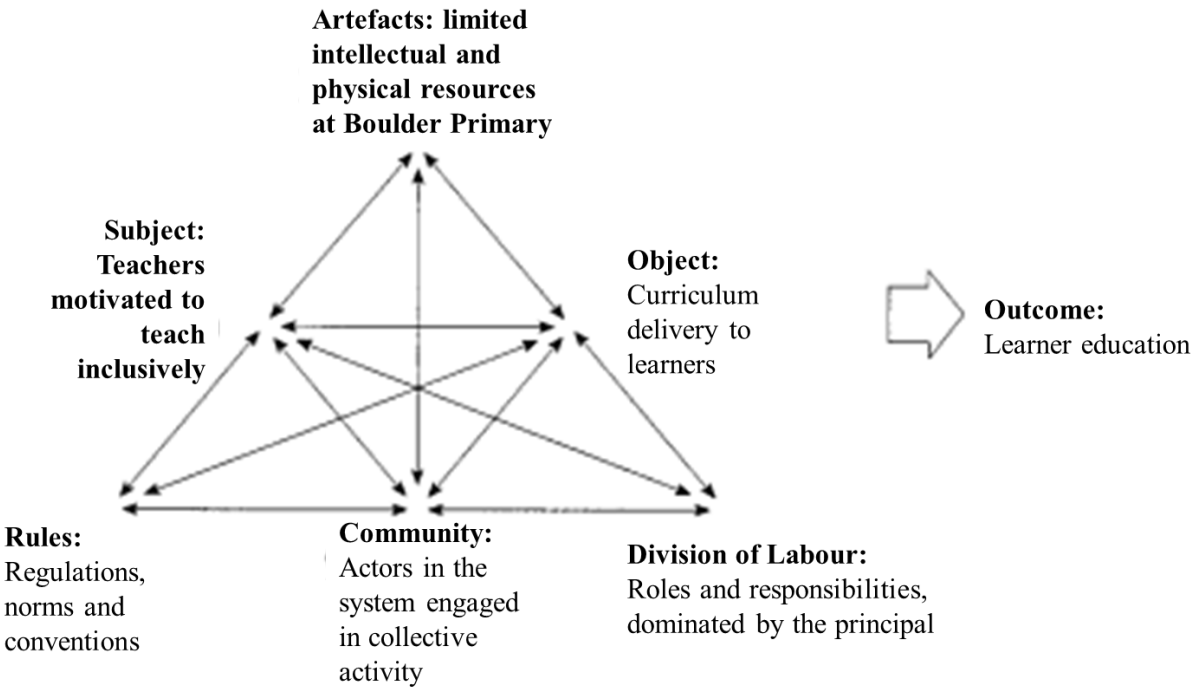
Boulder Primary School

Boulder Primary School presented with the same constraint but with a different origin. The findings showed how the economic challenges that the school community was faced with had led to an unresolved *primary contradiction* that existed throughout the system. This *primary contradiction* negatively impacted on the interaction between the *subject* (teachers) and the

mediating artefacts (human and physical and intellectual resources) of the school system and this manifested as the *secondary contradiction* (Engeström, 2000a; 2000b). This was evident when considering CHAT's third principle of historicity. The historical neglect of the school by the education department and the local community is epitomised by the shortage of accessible *mediating artefacts* available for the *subject* or teacher to use in an *activity* directed towards the desired but untransformed *object*. In the observation notes and outlined in the interview data the findings showed that there was a lack of resources available to support the teachers in their activity (teaching). This includes a dearth of teaching materials, text books, service providers, support documentation, learner support materials etc. It was evident that there was no *artefact* support available for the teachers. Amenities like computer access and internet access which are taken for granted as an available mediating artefact at Riverbend, as well as simple amenities such as text books or curriculum resources are not an option for use by any staff member at Boulder Primary. These findings are congruent with what scholars (Kenworthy & Whittaker, 2000; Soudien & Sayed, 2004; Wildeman & Nomdo, 2007) conclude where they argue that the central reason for a lack of traction of the inclusive teaching in South African schools rests with the disparity and uneven distribution of available resources to schools and the socio-economic challenges created by uneven wealth distribution. As discussed earlier in this section, these findings are aligned with the theoretical standpoint of Vygotsky (1978), who refers to the object-orientated artefact-mediated nature of activity. Vygotsky (1978) argues that without available *artefacts* the resultant *secondary contradiction* inhibits meaningful *activity* towards *object*. The limited resources at the school created a contradiction between the *subject* (teachers) and the artefact/tools (physical and human resources) components. This contradiction was unresolved at the time of the study and as a result inclusive teaching was constrained.

Figure 11 shows the tension or *secondary contradiction* that has been shown to exist between the *artefact/tools component* and the *subject component* in Engeström's (2001) adapted activity system representative of Boulder Primary School. This contradiction was found in the data to constrain activity towards the *object* at Boulder Primary School.

Figure 11: Activity systems model representing Boulder Primary School (adapted from Engeström, 2001)



8.6 Focal point five

8.6.1 Expanded contradictions that exist between the subject component (teachers) in the schools and other activity systems in society that have a vested interest in schools (teacher education institutions/universities)

To focus the enquiry, I use Rogoff's (2008) Planes of CHAT Analysis, namely the *institutional community plane* to examine the relationships between different institutions or activity systems that share a common interest within the fabric of society. Contradictions also exist between activity systems who share a similar *object*. As shown in this chapter, the teachers represent the *subject component* within the school activity systems. However, these teachers were educated at various universities to prepare them for the teaching profession. These universities are separate complex systems in their own right with a vested interested in the education of the pre-service teachers. From the universities' perspective pre-service teacher education is the *object of activity* within the internal dynamics of the tertiary institution while the student teachers represent the *object* component which is acted upon by *activity* from the university

lecturers. In this case these lecturers represent the *subject* component at the university. In a school however, the teachers represent the *subject* component. The university represents another activity system that is a fiber in the fabric of society in which both schools and universities are inextricably "intertwined" threads that are durably bound by their common interests (Engeström, 2009, p. 23). Scholars like Daniels (2004b) explain that to understand how teachers act in the present one must consider their history when they were part of, on influenced by, another activity system that has a shared interest (activity) with their current activity system. This means that the local history within the four schools and the *subjects* (teachers) are also interwoven and embedded in the broader national history of the country and its educational systems (Oswald, 2010).

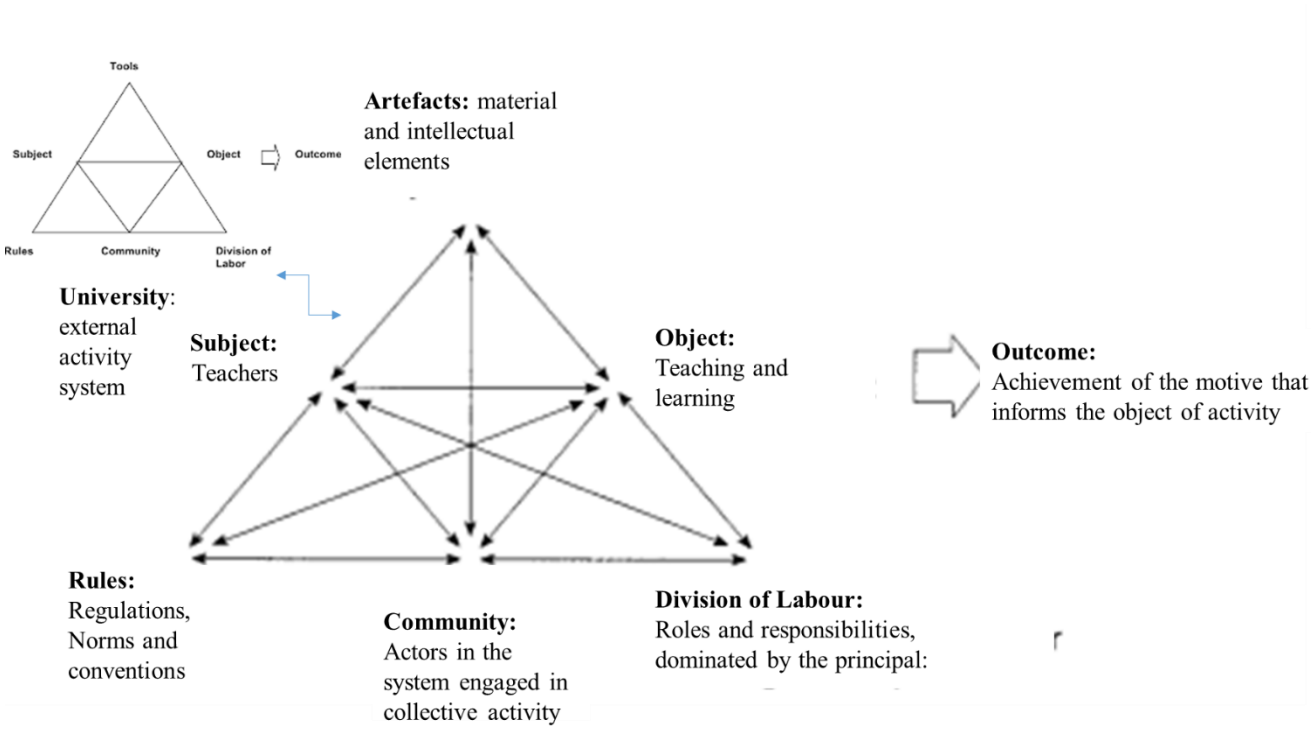
To identify the contradiction between teachers' training needs for inclusive teaching and the professional development they received at university I used Barab and Squire's (2004) *activity-settings* technique to 'zoom in' on the relationship between the components of teachers in schools and their experiences at university. This allowed me to isolate findings that are pertinent to the relationship between these specific components between activity systems. The historical tensions between teachers and their formal pre-service education and their desire to teach inclusively contributed to an internal *contradiction* within or intrinsic to the teachers that had not undergone transformation and thus continued to constrain their ability to teach inclusively. Taking the third CHAT principle of *historicity* into account as a theoretical lens it is important to consider the influence of historical factors on teachers' ability to implement inclusive teaching practices in their classrooms. Across all four schools the evidence pointed to a contradiction between what was taught to teachers in university courses about inclusive teaching and what the *subjects* (teachers) found was the reality of inclusive teaching in the classroom setting.

From a CHAT perspective the contradiction between teachers' ideas about what it means to teach inclusively and the university education that did not prepare them adequately for the challenge of inclusive teaching is indicative of a *tertiary contradiction.* This *tertiary contradiction* is between two different systems in society that share common components. This *tertiary contradiction* constrains teachers in their ability to teach inclusively, as teachers enter the workplace without suitable skills for inclusive teaching. Using activity systems frameworks (Engeström, 2000a; 2001) to examine the relationship between teachers and their initial teacher education allowed me to obtain a unique insight into the original 'causes' that created the

'symptom.' This finding can allow further research into the dynamic relationship between teachers and their initial teacher education.

Figure 12 shows activity systems models representing the contradiction between the teachers as the subject component in the school system and the teachers as the object component or problem space in the university system.

Figure 12: Activity system showing contradiction between two separate systems with a shared component (adapted from Engeström 2001)



8.7 Focal point six

8.7.1 Relational agency and relational engagement and the principle of the multi-voiced nature of activity systems: Considering this impact on subjects (teachers) and the community of teachers who share an intended object of activity (inclusive teaching)

Contradictions that emerge in activity systems are not to be mistaken as problems (Kuutti, 1996). In fact, Kuutti (1996) argues that the existence of contradictions in a complex system becomes the catalyst for change and future evolution. Kuutti (1996) argues that contradictions generate innovative attempts to change the activity or the *object-of-activity*. The innovations or transformations are not necessarily planned but emerge as a result of the tensions that exist within and between components in an activity system.

This often-unintentional result of the emergence of contradictions allows researchers to examine the relationships between components to identify what behaviours had a role to play in the transformation of the *object*. CHAT offers theoretical tools that can assist a researcher in identifying the origins of transformation resulting from contradiction. "*Relational agency"* and *relational engagement* have been identified as theoretical tools to provide a lens through which to identify the cause of transformation (Edwards, 2007, p. 7). *Relational engagement* can be loosely defined as a collaborative practice of human interaction around a shared concern. Scholars (Edwards & Mackenzie, 2005) argue that *relational agency* is concerned with the capacity for a person to actively seek out and ask for support to achieve goals and in turn offer support to other members of the community. The findings show that there is evidence of inclusive teaching *actions* taking place in all the schools. These *actions* (inclusive teaching) are a result of innovation and collaboration between members of the collective *community* component (teachers at the school). These emerge in response to tensions and contractions that developed historically.

Although instances of inclusive teaching were observed they were sporadic and not systemic to the *shared activity* of the school system. In none of the schools was there any evidence of teachers teaching inclusively on a regular basis, but rather the teaching was fragmented and applied by teachers when an opportunity presented itself. I argue that this was as a result of two factors: first, inclusive teaching occurred within a system that was influenced by a multi-voiced *object-of-activity* (Engeström, 2001) with various actors having a different lens or viewpoint on how to direct *activity* (teaching). This resulted in confusion around the multi-voiced *motives* in relation to the existing *object of activity*. This finding supports the views of Kaptelinin (2005) who explains how within an activity system one or more *motives* directed towards an *object* affect the *activity*. Kaptelinin (2005) explains how even if these *motives* are powerful, the *activity* does not begin until the *object of activity* is clearly defined. Secondly, contradictions between components have not had the desired disruptive effect, with the resultant emergence of a changed and ultimately different *object-of-activity* in alignment with the ideas of inclusive teaching (Blin & Munro, 2008; Engeström, 2000b; 2001).

However, despite this, the evidence did indicate that there were instances of inclusive teaching at the four schools. The findings also showed that the teachers were motivated to teach inclusively and had an orientation to the social model when it came to the idea of learner difference. This internal motivation prompted the teachers to take action in finding ways of teaching learners with a wide range of different learning needs. This was evident for all the

teacher participants. For example, Brenda commented on her self-motivated and proactive efforts to find ways to teach inclusively when she said: *"I would go to our colleagues I would say, 'You know what, I noticed that this works in your class how do you do this?"* Finding self-motivation to compel the teachers to find solutions to the challenges of teaching to learners with a range of different learning needs was also evident when Helen said: "*We're trying to have a like a peer sort of review support thing where you go in and watch each other's lessons and try and learn from what someone else is doing and get advice…"* Here she spoke of how her colleagues actively planned to develop their inclusive teaching strategies through cooperative and collaborative activities.

It is argued that these instances of inclusive teaching have their origins predominantly in what CHAT researchers (Stetsenko, 2005; Edwards, 2007) refer to as *relational engagement* and *relational agency*. Findings show that within this study evidence of *relational agency* and *relational engagement* amongst teachers at the four schools was evident. The *relational agency* between and within the subject (teachers) afforded the implementation of inclusive teaching in environments that were deemed to be constraint to inclusive teaching. This was evident where teachers made a conscious effort to seek out ideas in how to teach to a range of different learning needs presented by their learners.

What the findings illustrated was how a desire within the teachers to build relationships and collaborate with different people (teacher colleagues) within the school *community* component allowed for cooperative *action* and co-evolution of an existing *object.* This cooperative action had the potential to allow teachers to enact individual *actions* (lessons) that were aligned with the ideas of inclusive teaching, - which ultimately has the potential to transform and evolve the existing *object of-activity*.

This co-evolution between the *subject* and the *object* components and between *subjects* (teachers) who, by virtue of existing in the same activity system, share a common *object* (Edwards, 2007). I argue that this co-evolution of the object interacting and existing in the same activity system is a significant contributor or affordance to teachers being able to implement inclusive teaching practices in their teaching contexts.

By using Edwards' (2007, p. 9) theoretical tool of *relational agency* as a lens to interpret the findings it emerged that a significant contributor to the participant teachers being able to implement inclusive teaching strategies was due to what Stetsenko (2005) describes as the horizontal relationships and social interactions that exist between the teachers and other

members of the *community* component. As mentioned, when the teachers were asked in the interviews where they gained the ideas that informed their inclusive teaching, the majority of them referred to the support and advice they received from their colleagues in formal and informal communication and collaborative peer-to-peer settings.

The finding that emerged was that even in an environment where the defined *object of activity* is not favourable towards inclusive instructional practice, *relational agency* between the teachers and the other members of the teaching community afforded the teachers the ability to teach inclusively. This indicates that the professional relationships between teachers and the potential for *relational agency* that can emanate from professional peer-to-peer engagement have the potential to elicit change. This change, as a result of *relational agency*, becomes a new and powerful motive that has the potential for expansive transformation where the existing *object of activity* within a system changes into a transformed and then different *object of activity* (Engeström, 2000a; 2001; Foot & Groleau, 2011). These findings are congruent with the research findings by Walton and Rusznyak (2014) who conclude that collaboration can be effective ways for teachers to share good practice on what it means to teach inclusively.

An alternative way of interpreting the findings and explaining how teachers were able to demonstrate inclusive instructional practices can be explained through Engeström's (1999b; 2001) metaphor of *knotworking*. These *knotworking* relationships between teachers in the school community explain how inclusive teaching can emerge and be effective in schools despite the considerable constraints to inclusive teaching already discussed. These actions of *knotworking* can cause disruption, which ultimately lead to an evolving and possible transformation of the *object of activity* at each school. However, the observed inclusive teaching is limited to isolated lessons (actions) within the school and does not account for the *shared activity* that acts towards the *object*. In this respect, the *object of activity* is unchanged or unaffected - transformation has not taken place and the existing contradictions or tensions remained unresolved.

Although Edwards's (2007) conceptual tool of *relational agency* has been identified from the findings as a factor that contributes positively towards teachers' use of inclusive teaching strategies in their classes the data does show that other constraints that exist within the context of each school negatively impact on these relational practices or collaborative engagements. This result from my findings supports the work of scholars (Nel, Engelbrecht, Nel & Tlale, 2017) who conclude from their study into South African teachers' views of collaboration within

an inclusive education system, that despite the appeal of collaboration the numerous challenges in the school make interdisciplinary collaboration challenging. Figure 13 shows the relationship between teachers (subject component) and the other teachers (community component) that affords inclusive teaching *actions.*

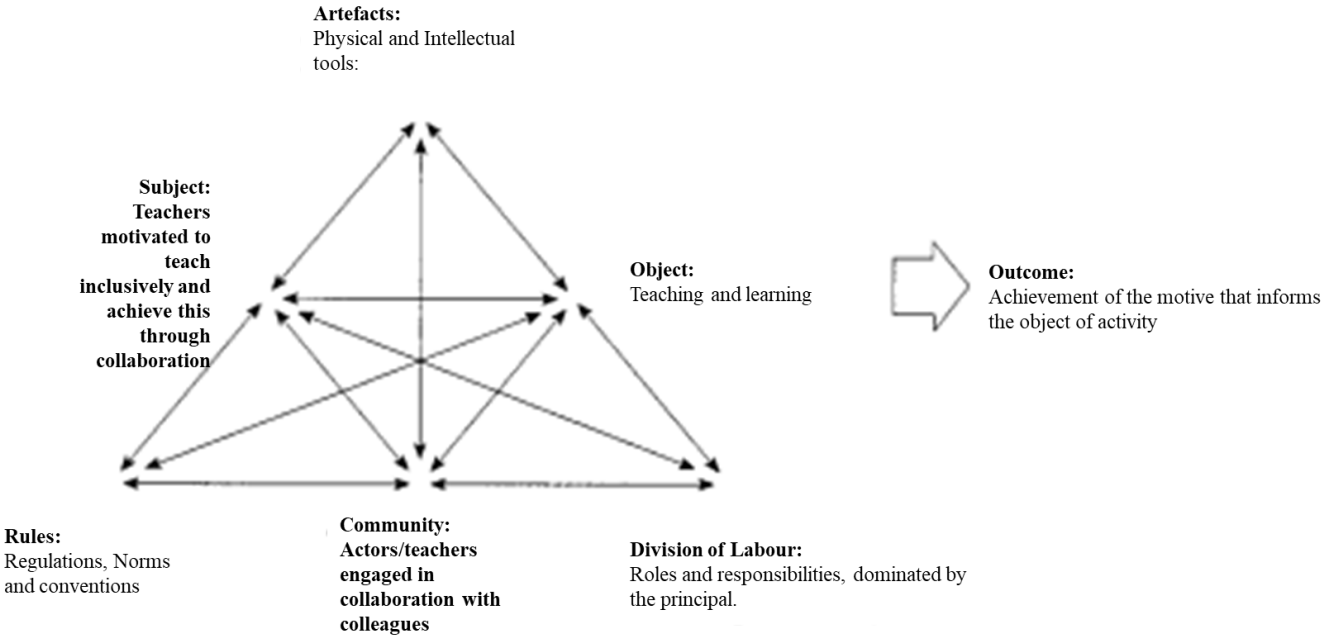


Figure 13: Activity system showing the collaborative relationship between teachers and the teaching community (adapted from Engeström, 2001)

8.8 Conclusion

In this chapter the qualitative data that emerged from the four separate research sites was explored by considering the findings through the perspective of second and third generation activity systems models and the conceptual tools of relational agency and relational engagement. In Chapter Nine I draw conclusions and make recommendations for future studies based on the findings that emerged from Chapter Seven and Chapter Eight.

CHAPTER 9

CONCLUSIONS, LIMITATIONS OF THE STUDY AND RECOMMENDATIONS

9.1 INTRODUCTION

This study has offered me an opportunity to interact, converse and communicate with multiple stakeholders in the sphere of education, particularly school personnel in South Africa. I had the unique opportunity of conducting research in four schools that were willing to participate in this study. From my experiences in the schools it was deduced that the educators do try to extend learning opportunities to all the children in their care. What the findings revealed was that schools are complex systems with powerful historical influences or motives impacting on teachers being able to meet the challenge of teaching to learners with a wide range of learning needs. What also emerged was that the complexity of school systems, with the tensions between and within the components in the system constrain teachers' ability to meet the challenges associated with inclusive teaching. What the findings also revealed, beside the considerable internal and external pressures that limited teachers from teaching inclusively, was that their internal or intrinsic desire to teach to all learners often prevailed and they demonstrated instances where they taught inclusively.

This study was unique in light of the fact that there has never before been a study done in South Africa through a CHAT framework that investigates the systemic factors that constrain or afford inclusive teaching in multiple South African schools. Rather than consider isolated factors, or investigate single phenomena as constraints to inclusive teaching the findings showed how the functioning of schools, as complex systems, and the interaction of the people who work in these systems, afforded or constrained inclusive teaching. In the sections that follow I describe the specifics of the findings in relation to the research questions outlined in Chapter One.

9.2 Research question one

What factors limit teachers from implementing inclusive teaching strategies in South African schools?

The findings showed that within the school systems the teachers, principals, the community of educators who make up the staff component, the learners, the rules that dictate the directives

of the curriculum and the available physical and human resources all interact dynamically towards the intended outcome of providing education for the learners. The findings showed that none of these factors or components operate in isolation from one another. The results showed that to draw a conclusion on the limitations to inclusive teaching by only looking at one factor would promote results that would be limiting in themselves. This is congruent with Cochran-Smith et al. (2014) who conclude that our knowledge of pieces and parts of teacher education has not provided us with comprehensive explanations about how teacher education functions as a whole or why teachers seem to have an inability to enact the transformative practices aligned with the goals of their formal teacher education programmes. It is also suggested by Cochran-Smith et al. (2014) that the teachers' ability to create meaningful teaching and learning opportunities cannot be studied in isolation from the influences of the school they work in, with its curriculum pressures, ethos, the learners' and the teacher's personal dispositions towards inclusion.

9.2.1 Pre-service education as a constraint to inclusive teaching

Most of the teachers were critical of their pre-service education for inclusive teaching. Many of the teachers argued that their pre-service courses were too short in duration and did not form a significant part of their pre-service teacher education. Most of the respondents argued that the university courses relied too heavily on theoretical content with little opportunity provided for consolidation of what was taught being applied in practical circumstances. Most of the teachers also criticised the syllabus content of their inclusive education courses where, in most cases, it was not based on the ideas of inclusive education. Rather, the content was informed by the ideas of special needs thinking and a medical model. This left the teachers confused as to exactly what inclusive education was and how to implement inclusive teaching in their classrooms and importantly, how to differentiate between what can be defined as inclusive teaching and what was more reminiscent of special needs thinking.

I reached the conclusion from the findings that most of the teachers confuse the ideas of inclusive teaching with a medical/individual model of supporting children with a wide range of different learning needs. This was linked directly to their university teacher education leaving them underprepared for the challenges associated with inclusive teaching. Also, the majority of the teachers welcomed and valued advice from specialist service providers, when available, who they felt where better equipped to handle the different learning needs that they were faced with in the classroom. I argue that one reason for the confusion between inclusive

teaching and the ideas of special needs thinking can be related back to the teacher's pre-service education for inclusive teaching that did not make explicit the differences between what was to be considered inclusive teaching as opposed to what can be considered the ideas of special needs teaching.

The findings showed that under-preparedness in the teachers for inclusive teaching was as a result of little attention given to ongoing teacher development for teacher education. This meant that teachers relied on their pre-service education as the only formal instruction they received to equip them with strategies for inclusive teaching. The findings showed that in all the schools there were challenges regarding in-service teacher development for inclusive teaching. The large majority of participants reported that there was no focus on teacher development, specifically development for the purposes of improving their ability to teach to a range of different learning needs. It is therefore concluded that this constrains inclusive teaching.

9.2.2 The prescribed National Curriculum as a constraint to inclusive teaching

The findings showed that the nationally prescribed curriculum constrained teachers' ability to teach inclusively. The large majority of the teachers regarded the CAPS curriculum as having a negative impact on teaching and learning. First, teachers reported that the there was too much content or subject matter that was expected to be covered in a calendar year. Secondly, teachers criticised the CAPS assessment polices and externally prescribed assessment tools as not considering the different learning needs of the children. Thirdly, the externally provided assessment tools that included tests and project descriptors were often unsuitable and inaccessible to those children with different learning needs. Instead, these assessments were aimed at the majority of learners. This finding is congruent with the findings of Florian and Black-Hawkins (2011) who speak of bell-curve teaching. Finally, the majority of the teachers commented that there was not enough time in the academic calendar to teach all the prescribed subject matter in a way that allowed for all the children to learn. Also, the teachers remarked that there was no time provided in the curriculum to consolidate topics taught or use instructional techniques like differentiated instruction or group work learning to aid inclusion. I therefore conclude that the prescribed curriculum is a constraint to inclusive teaching in the schools.

9.2.3 School leadership directives as a constraint to inclusive teaching

The leadership at each school was found to limit inclusive teaching. This was found to be the result of intrinsic and extrinsic factors. Intrinsic factors: some principals had an orientation of

responding to learners with a range of different learning needs that was internally motivated by their own ideas of special needs thinking or a medical model. The findings showed that these principals directed teachers to seek outside interventions to assist children who could not cope with regular lessons. Some principals recommended that learners who could not cope with the teaching programmes offered should leave the school as they did not fit in. Extrinsic factors: other principals were in favour of inclusive teaching. However, the findings showed that policies that resulted from the historically motivated mandate that formed the school ethos, and in some cases economic factors, constrained the principals' ability to promote inclusive teaching at their schools. The findings showed that despite personal intrinsic intentions, it is expected that the principal uphold and lead the directives of the ethos of the school. In one example the school's ethos was motivated to be focussed on competitive academic achievement and not the ideas of cooperation associated with inclusive teaching. Again, at another school, the constraint presented to the principal was the challenges associated with staff shortages, a lack of physical and human resources, funding, time for staff development and limited leadership capacity. As a result, the principal directed most of his attention to school functioning operational issues rather than on how teaching and learning happened in the classroom space.

9.3 Research question two

How do we account for the implementation of inclusive teaching in South African schools?

The findings showed that the majority of the teachers believed that all the children they taught had a right to an education and the opportunities on offer. All the respondents explained how they envisioned teaching as a calling, and that they were committed to the development of every child despite the sometimes overwhelming circumstances that made their ability to teach inclusively difficult. I concluded from the findings that this internally motivated, positive attitude and commitment to the idea that all children had a fundamental right to quality and equitable education afforded some inclusive teaching at the four research sites.

9.3.1 Collaboration as an affordance to inclusive teaching

Collaborative action between teachers was identified as a mechanism that improved inclusive teaching. Teachers often relied on formal and informal cooperation between colleagues to find solutions to teaching children with a range of different learning needs. Through collaboration the teachers found ways to meet the challenge of finding ways of responding to the different

learning needs of their children. The findings showed that the respondents entered into formal and informal interactions with peers in the school community to share ideas of applicable practice. These initiatives were the efforts of the community of teachers and sometimes between two colleagues who shared the teaching of a grade and were not directives from the leadership. It is concluded that this showed personal initiative from the teachers to seek out teaching methods for inclusive teaching. The findings revealed that collaboration happened in structured and unstructured formats and included observing fellow teachers' lessons when they had available time, discussing inclusive teaching ideas in informal settings during recess time or after the school day, and formally setting up times in the school calendar to meet in a forum and have a discussion on how to teach a class with children with a wide range of different learning needs. I conclude that collaborative acts between colleagues afford actions of some inclusive teaching at the research sites.

9.4 Research question three

How might Cultural Historical Activity Theory inform an understanding of what limits and what enables the implementation of inclusive teaching strategies in South African schools?

From the findings it was revealed that in cases where the existing *object-of-activity* was not aligned to the ideas of inclusive teaching the *subjects* (teachers) were limited in their ability to engage in the *activity* of inclusive teaching. By considering the findings from a CHAT perspective I was able to examine the historical 'sediments' (Ellis, 2011) that influenced the nature of the existing *object of activity* at each school. At most of the schools, the historically motivated 'sediments' of a medical model approach influenced the evolution of the *object of activity* over a period of time. This resulted in the *artefacts/tools*, the *community* and the *division of labour* components in the system being aligned to this historically motivated medical model orientated approach to teaching. This created a *tension/contradiction* that existed between these components and the *subjects* (teachers) who desired to meet the challenge of teaching to all learners in the classroom context. At all the schools this *contradiction* remained untransformed and the traction of inclusive teaching practices was therefore constrained. In the sections that follow the specific conclusions reached in this thesis are outlined.

9.4.1 Contradiction between the rules component in schools, dictated by the Department of Basic Education, and the subject components

The findings showed that the Department of Basic Education (activity system) dictates that schools comply with the directives of the nationally prescribed curriculum. The intended outcomes of the DBE inform the *object of activity* through the *rules* component, which then influences the actions of the *division of labour* component and the allocation of the *artefacts/tools* component found in the school system. The *rules* component and the *artefacts/tools* component directed that the *subject* (teachers) complied with the directives of the CAPS curriculum. These findings align with Kuutti's (1996) finding that the *rules* component of an activity system dictates both explicit and implicit conventions and social relations within a given community or society. Therefore, it is concluded that the *secondary contradiction* between the *rules* that dictate compliance with the curriculum and teachers' intentions to teach for all learners in their classes constrained teachers from teaching inclusively.

Furthermore, the second basic principle of CHAT refers to the multi-voicedness of activity systems which can create the *secondary contradiction* between components within the system. I conclude that the multi-voicedness of the of the school systems constrains inclusive teaching. This is specifically with regards to the externally imposed *rules* that govern the function of the schools with one voice and the *subject* (teachers) who are motivated with another voice. My findings support scholars (Geldenhuys & Weavers, 2013; Nel, Tlale, Engelbrecht & Nel, 2016) who conclude that the pressures on teachers to follow the directives of the CAPS curriculum constrain teachers' efforts to implement inclusive teaching methods in their classes. The conclusions reached in this study can inform future research as they point to a constraint to inclusive teaching in South Africa. It is envisioned that these findings can lead to further research into curriculum design in line with the ideas of inclusive instructional practice.

9.4.2 Contradiction within teachers between an individual model and a social model of learner difference

The researcher concludes that teachers' pre-service training was insufficient to prepare them to teach inclusively. The findings showed that all the teachers described how their individual 'teacher education for inclusive teaching' was limited in scope, counterproductive or not sufficient in content or allocated time to prepare them for inclusive teaching. The evidence suggests that the respondents' pre-service education for teaching learners with different learning needs was not the intended object-of-activity of the system. Therefore, for all the

teachers, university preparation or pre-service education constrained their ability to be inclusive practitioners. It is also concluded that for many of the respondents, while they are motivated to teach for all their learners, they nonetheless confuse the ideas of inclusive teaching with those ideas of special needs thinking. It was concluded from the findings that the ideas of inclusive teaching were not made explicit to the teachers at university and were often coupled together with the ideas of an individual model. This confusion or lack of clarity around what inclusive teaching is remains a constraint to inclusive teaching. The findings can be used to inform university educators to mitigate against inadequate teacher preparation for in inclusive teaching.

9.4.3 Contradiction between teachers and the school leadership

From a CHAT perspective, I examined the interactive relationships between *subjects* (teachers) and the school leadership and how this influenced the teachers' ability to implement inclusive teaching practices. It was concluded that at the research sites the teachers are governed by the school leadership headed up by the principal, the needs and motives of the community and the directives of the DoE. In their respective schools the findings revealed that teachers had a limited opportunity to exercise their own agency and ultimately had to fit in with the working conditions and the *shared activity* of the school system.

What the findings revealed was the existence of a *secondary contradiction* between the teachers (with an internal motive to teach all learners) and the motives of the school which is directed and upheld by the school leadership team with a different *object of activity*. It became evident that the authority of the school principals over the *activity* within the school was also directed and influenced by the motives that originated within the *primary contradiction* of the system. The contradictions did not have the same historical motives at each separate school, however, the net effect was the same, as at each instance, the motives of the school leadership and the ethos were not orientated to inclusive teaching. What can be concluded is that the historically motivated influences of the *object-of-activity* were not aligned with the ideas of inclusive teaching. These findings are supported by the work of scholars (Shevelin & Rose, 2017; Oswald, 2010) who attribute the influence of the principal as being pivotal in affording or constraining inclusive education in his/her school.

9.4.4 Contradiction between the teachers and the artefacts at their disposal to mediate activity

As Vygotsky (1978) argues, learning is a mediated process between the *subject* and the *object* with the assistance of *mediating artefacts* and *tools* and without suitable *mediating artefacts* the *subject's* ability to mediate learning is constrained. Vygotsky's argument is supported by my conclusion that either a shortage of mediating resources or the allocation of mediating resources in the schools constrained inclusive teaching. I argue from a Vygotskian perspective that the knowledge and skills of inclusive education, whether obtained through in-service workshops or teaching materials can be considered a mediating artefact. Therefore, from the findings it can be concluded that a shortage of human and physical resources allocated for inclusive teaching purposes in the schools fits with the category of mediating artefacts, which through their absence, constrains inclusive teaching.

9.4.5 Teacher agency as a powerful tool for collaboration to afford inclusive teaching

It became evident from the findings that the teacher participants were motivated by the ideas of a human-rights and a social model orientation and believed that all children deserve equitable opportunities in an education. The majority of the respondents also remarked that no child should be denied an education as a result of a learning difference that could negatively impact on their ability to learn. The teachers also commented on how all learners be allowed the opportunity to learn and socialise alongside one another and that it was unconstitutional to segregate learners and limit their opportunities as a result of disability, be it socially, physically or cognitively manifested.

The teachers all responded that they were in some way emotionally invested in the education of all learners regardless of the challenges associated with teaching children with a wide range of different learning needs. This intrinsic motive of the respondents to meet the challenge of teaching to a range of learning needs was evident across all four of the schools despite the fact that all the schools were separate and contextually different. The findings showed that this attitude to teach to 'all' learners translated into motivation to meet the challenge of teaching learners with a wide range of different learning needs. The result of this internal and external motivation translated into *actions* that stimulated interaction and cooperation with other members in the community. The findings revealed that this collaborative *action* manifested into numerous isolated instances of inclusive teaching. From a CHAT viewpoint, where teachers were motivated to find ways of making their lessons accessible for all learners, the result was that this stimulated *action* towards transforming the existing *object-of-activity* even

if the transformation was not seen to have taken place at any of the research sites. I conclude that where teachers collaborated to find solutions to the challenges of inclusive teaching there was evidence of *teacher agency* and *relational engagement* in action (Edwards & Mackenzie, 2005; Edwards, 2007). These actions were evident from the data, where teachers would actively pursue avenues to enhance their ability to teach inclusively. This finding was found to be applicable at each research site, despite the identified constraints to inclusive teaching practices. The *relational agency* was as a direct result of an attitudinal orientation towards inclusive teaching that motivated the respondents in seeking out collaborative engagements of various descriptions. This included knotworking (Engeström, 2014; Engeström et al., 2012) in order to discover new ideas around inclusive instructional practices. The *relational agency* and *relational engagement* resulted in planned and spontaneous collaborative events where best practice was shared and ideas were promulgated to assist teachers in teaching inclusively. These were found to exist on what Stetsenko (2005) called the horizontal plane.

As previously mentioned, it is clear from the findings that although the teachers were motivated to make learning opportunities accessible to all learners such motivation did not get an opportunity to evolve into a transformed *object of activity* as a result of primary and secondary contradictions. It is explained by scholars (Roth & Tobin, 2002; Engeström, 2000a) how the emergence of contradictions in activity systems exist to disrupt the status quo and eventually initiate evolutionary transformations of the object of activity shared by the various actors/subjects within the system. This new object of activity has the potential to 'spiral' out of the original activity system and influence and change other activity systems in society. However, disruption caused by the primary contradiction does not always take place and as a result the contradiction remains unresolved. It was found that in all the schools, the primary contradiction had remained unresolved at the time of the study and the result was that the teachers were constrained from teaching inclusively.

When examining this evidence through the lens of CHAT these 'moments' of observed inclusive teaching only constitute what Engeström (2000a) calls individual *actions*. If these were observed in isolation in a study, they could convince a researcher that these teachers are being successful in teaching inclusively. However, the reality is that when considered through the CHAT lens these *actions* are isolated events and have limited or no bearing on the reality of teaching in the school which, over time, constitutes the *shared activity* of all actors within the system towards the designated object. In this regard the respondents' internal *motives* that contradict the existing *object-of-activity* are modified and reduced by the social context and the

conditions and means available within the activity system (Kaptelinin, 2005). With the dominance of this existing *motive*, transformation and systemic change towards a new object-of-activity is constrained.

These findings can inform further studies. First, the conclusions draw attention to the need to be cautious of isolated research projects on inclusive education that do not consider historical motives existing within and between the components within a system nor the influence of motives from other systems in society. Secondly, the findings show that for the ideas of inclusive teaching to gain traction in a school system they need to be powerful enough to transform the *object-of-activity* in existence at the school. Thirdly, it is important to mention, that although the findings of this study predominantly relate to individual factors that constrain teachers from implementing inclusive teaching strategies, which are congruent with most of the findings of other researchers in inclusive education, it needs to be emphasised that other research studies discussed in the literature tended to focus on individual factors rather than on a specific school as a complex system. Finally, I argue that future research projects could see value in approaching the issues of inclusive education in schools from both a practice point of view, in other words what exactly can be defined as inclusive teaching, and a systems theory lens.

9.5 Limitations of this study

It needs to be considered that this research project focussed on four different research sites in South Africa. The aim of the research was to investigate the constraints and the affordances to inclusive teaching at these sites through the theoretical framework of CHAT. The findings provided rich data that showed how systemic interactions between and within components in school systems and interactions between nested systems in society promoted and constrained inclusive teaching. However, the scope of the study, with a small number of schools, limits the generalisability of the findings to other contexts in the world.

There was also the possibility of bias in that I was both the researcher and the interviewer who was a part of this study. It needs to be recognised that there is a complexity to the role of researcher and the issue of power relations and the inevitable power relations that exist between the parties. This potential limitation was mitigated by considering what Brookfield (2010) describes, and is discussed in the methodology section in this thesis, as entailing me, as the researcher, making it clear to the teachers and principals what my role in the research process would be and how I felt that my role could inadvertently influence their answers to questions

or make them feel uneasy. Also, it needs to be mentioned that despite my best intentions, my multiple roles in this project, whether intentional or not, would have impacted the formation of the research questions, the site selection, the interview process and the analysis and interpretation of the research data. In openly acknowledging these limitations in this section and by addressing these limitations in the methodology section it is the intention of the researcher that I have made explicit my awareness of the limitations and described the mechanisms I have put in place to control and manage them.

A further limitation to this study was that the research was limited to thirteen participants across the separate research sites. However, this limitation was countered by the in-depth nature of the study and the support provided by considering the findings through the framework of CHAT.

9.6 Recommendations for future studies

There are few studies that have investigated what affords or constrains inclusive teaching from a systemic perspective, where a researcher focusses on the contradictions between the multiple components within a school. A limitation of this study was that it was conducted at only four research sites and it is therefore recommended that future research could scale up this study into other schooling environments. For example, CHAT theory can be used to identify the systemic factors that are constraining or affording inclusive teaching in a wider variety of complex contextual systems. The findings on the role of relational agency as a catalyst to collaboration between members of the teaching community has potential as a rationale for further research. Some research has considered the role of collaboration in teaching, however, there are very few examples where collaboration between teachers has been investigated from a systems theory perspective, and where the motives that inform personal agency in actors leads to collaboration which then has the potential to transform the existing object of activity in a school. These findings can inform school leadership and teacher training institutions in that efforts need to be made to examine the systemic relations between components in schools and between relevant systems in society. This realisation will drive teacher training and leadership to move beyond training that is isolated to one dimension or component of the action of teaching and towards examining how unique components interact in systems.

The results of this study can also inspire future research that looks at the relationships between activity systems in society that have a shared interest. There is a rationale for research into the contradictions between the object-of-activity of teacher education institutions (Education

Faculties at universities), with their intended outcomes for newly qualified teachers entering the profession, versus teachers operating as the subject component in school systems with differently motivated objects. Essentially, Engeström's (2001) third generation activity system could be employed as a framework to examine the tertiary contradictions that exist between pre-service teacher education in one system and the experience of the qualified teacher working in a school as another system within the South African education context.

In summary, the findings from my study have implications for higher education programmes for teacher preparation. The study provides scope for both pre-service teachers and teacher education programme/course designers to consider the complexity of the school system and its implications for inclusive teaching. Furthermore, this study allows for teacher educators to consider the interactive relations within and between the components that operate in these systems and how these relationships can either constrain or afford inclusive teaching. I argue that the findings from this study will benefit teacher practice, whereby teachers will be able to see the value of peer-collaboration as a means to influence, or transform the existing, historically motivated object-of-activity in their respective schools.

Also, my findings have implications for education policy design. I envision that when these findings are communicated to policy designers, at the Department of Basic Education in South Africa for example, it will highlight the importance of considering the interactive relationships between the various components that operate in schools and how tensions within and between these components can constrain teachers from practicing inclusive teaching in their classes. The findings will also illuminate to policy designers how constraints that affect one component, a school's human and physical resources for example, can then constrain the activity of teaching, as this constraint causes tension between multiple components. Finally, my findings will prove to be valuable to stakeholders in education, including teachers, teacher educators and policy designers, as it brings to their attention that there exists no 'one-size-fits-all' scenario where schools are concerned. Therefore, it is important to mention, that although there are a multitude of systemic factors identified in the findings, that are congruent across school contexts, the functioning of each individual school, as a unique complex system, must be kept in mind at all times and that each school in a given society is a complex entity that is influenced by its own unique, contextual history and shared relationships both within and between the relational components.

I recognise that my findings will not provide solutions that are fully comprehensive and I am fully cognisant of the complexity of the historical and contextual challenges in which further research may be enacted. However, the findings of this study and further research do offer a way forward for researchers to think about how inclusive education can become the 'sense-maker' in school systems.

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APPENDICES

APPENDICES

APPENDIX 1: INTERVIEW SCHEDULE

Interview Schedule One for Teacher Participants

Interview schedule for the general semi-structured interview (teachers will receive a copy of the questions to familiarise themselves with what will be asked before the interview commences)

- What can you remember from your teacher education regarding inclusive education learning?
- Do you feel that your university education prepared you adequately for the challenges of teaching learners with different learning needs?
- How did you feel when you encountered learners with different learning needs when you began teaching?
- Can you share any personal stories from your experiences in the classroom when challenged by learners with a wide range of different learning needs?
- How would you describe your perception or understanding of what it means to teach inclusively?
- Do you feel competent in your ability to be able to cater to the learner diversity that you're presented with in the classroom?
- Describe the challenges you face in the class where you encounter learners with diverse learning needs?
- To what extent does the school environment in which you work have an impact on your ability to include learners with different learning needs?
- What environmental factors within the school constrain or afford you from teaching inclusively? Can you elaborate on these factors variables within the context of the school?
- Do you feel that the school supports you in your efforts to be an inclusive teacher? Please give examples of how the school constrains or supports your inclusive teaching.
- How would you describe your own personal philosophy or disposition for teaching of learners with diverse or different learning needs?

APPENDIX 2: INTERVIEW SCHEDULE

Interview Schedule for the School Principals

Interview two: The semi-structured interview with the school's principal (the principal will receive a copy of the questions to familiarise him/herself with what will be asked before the interview commences)

- Do you consider your school to be an environment that promotes the ideas of inclusive education?
- Can you recall any in-service teacher training for inclusion that your teachers attended at your school? If so, can you elaborate on the design and content of those courses?
- What, if any, provisions are in place to address the pedagogical practices to equip teachers to teach a diverse class or learners with different learning needs?
- Please elaborate on any school-based strategic management plan that is in existence to provide practical measures to cope with learner diversity and different learning needs?
- Are there internal policies in place to direct teacher practice to address different learning needs? If so, please describe how these policies are implemented and managed by the school's leadership team?
- What formal structures exist for teachers to collaborate to share ideas for how to meet the needs of learners with different learning needs in their classes?
- What additional human and physical support measures or resources are at your disposal in the school to address the needs of a diverse population of learners?
- How is inclusive teaching reviewed or evaluated during teacher lesson observations and performance appraisals?
- How is financial capital budgeted and allocated to provide special provisions for learners who require additional support?
- Is there a role for specialist support staff within the school to address learner diversity? If so, please elaborate on the job description of these learning support specialists?
- What is the ethos of the school towards the teaching of learners with diverse learning needs?
- What challenges do you see impacting on your school's ability to address the needs of a diverse learning community?
- What is your personal position on implementing inclusive education practices at your school to meet the challenge of teaching learners with a range of different learning needs?

APPENDIX 3: INTERVIEW SCHEDULE

Lesson Observation Interview Schedules with the Teacher Participants

Lesson reflections: interview schedule:

These interviews are intended to be more open-ended than the introductory interview; the questions are only intended as prompts for reflective feedback on the lesson observed by the researcher.

FOCUS QUESTIONS FOR THE REFLECTIVE LESSON OBSERVATION INTERVIEWS

- Please describe the lesson in terms of the learning objectives you intended to achieve?
- Can you recall from this lesson any specific teaching strategies that you used to include learners with a range of different learning needs?
- Can you recall from this lesson any instances where you provided assistance to a learner who struggled to access the curriculum content?
- Does your planning for this specific lesson contain any recommendations, or reflect any specific teaching strategies to meet the challenge of teaching to the range of different learning needs in this class? If so, please describe them?
- What were the specific challenges that you faced in your ability to teach this lesson with regards to the challenge of teaching learners with different learning needs?
- How did you include these learners with different learning needs into your lesson?
- Do you feel that there are any children who struggled to participate in this lesson? If so what were the specific challenges that they faced?
- How do you respond to the unique learning needs of the learners within the framework of the curriculum?
- Were you able to effectively cover the curriculum content you intended to teach to all the learners? Please elaborate on your efforts to deliver the curriculum requirements and reflect on what teaching methods assisted you or what the challenges were.
- How did you assess the class work of the learners, taking into account their different learning needs?
- Explain how your assessment strategy accounts for the diverse and different learning needs of the children in your class?
- Give a give a story of how you facilitated the need of an individual to enable him/her to access this lesson?
- Where do you feel you acquired your teaching knowledge to address the needs of leaners with different learning needs?

APPENDIX 4: ETHICS CLEARANCE

Wits School of Education

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E-mail: enquiries@educ.wits.ac.za Website: www.wits.ac.za

28 April 2015

Student Number: 9406366T

Protocol Number: 2015ECE006D

Dear Douglas Andrews

Application for Ethics Clearance: Doctor of Philosophy

Thank you very much for your ethics application. The Ethics Committee in Education of the

Faculty of Humanities, acting on behalf of the Senate, has considered your application for ethics clearance for your proposal entitled:

The extent to which early career teachers draw on their pre-service learning to respond to learner diversity and promote inclusivity in education

The committee recently met and I am pleased to inform you that clearance was granted.

Please use the above protocol number in all correspondence to the relevant research parties (schools, parents, learners etc.) and include it in your research report or project on the title page.

The Protocol Number above should be submitted to the Graduate Studies in Education Committee upon submission of your final research report.

All the best with your research project.

Yours sincerely,

Wits School of Education

Thank you

APPENDIX 5: REQUEST LETTERS

Request to conduct research at the school: letter for the principal

Wits School of Education

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Request to conduct research at [_____] Primary School

Dear Mr. _____

My name is Douglas Andrews and I am a PhD student at the Wits School of Education. My PhD study is part of a research project sponsored by the National Research Foundation (NRF). Dr. Elizabeth Walton is the NRF grant holder and my co-supervisor, together with Professor Ruksana Osman who is the Dean of the Humanities Faculty at WITS. Dr. Elizabeth Walton is also a Senior Lecturer in the School of Education at WITS. I know that teachers employ various practices in response to the needs of diverse learners. I am primarily interested in discovering what informs the teacher's inclusion practices. I am also interested in examining the extent to which teachers are informed by their university learning about inclusive education. I would like to request your permission and obtain your consent to conduct research at your school. To understand more about what inhibits or promotes teachers when responding to diverse learner needs I would like to invite two early career teachers in [school name] school to participate in this research project. (Suitability as a teacher candidate would be a teacher who teaches in the Intermediate Phase and is between his/her second and tenth year of their teaching career. The candidate teachers also need to be SACE registered teachers who qualified with a four year teaching qualification (or have completed a PGCE at a university in South Africa).

The first part of the teachers anticipated participation entails them responding to general, individual interview questions related to the inclusion pedagogies they employ in their teaching. This interview would take about 45 minutes and would be held at a place and time convenient to the teachers. With their permission, I would like to audio record the interview for accurate capture of the teachers' responses. The second component would involve my videotaping two (maximum) lessons and then conducting follow-up personal interviews

where they can reflect on their application of inclusion pedagogy in each lesson. The videotaping of the lessons will include having the learners in the video recording, but the focus will be on the teacher practice, and written informed consent will be requested from the learners and their parents. The two reflective interviews would also take about 45 minutes each to conduct. Finally, I intend to ask each teacher for copies of their lesson preparation and assessment materials so that I can conduct a content analysis of the information. If you have more than two suitable teacher candidates who are willing to participate I will use a random selection process (computer programme) to choose the two that I will invite to participate onto the study. The teachers will be supplied with the interview schedules before each interview to allow them to be prepared for the line of questioning. Learners who will be in the class when I videotape the lessons will also be considered to be full participants and I will thus invite them to participate in the study. As the learners are minors I will also have to ask permission form their parents for them to grant permission for their child to be allowed to be filmed in the observed lessons.

Participation is entirely voluntary and teachers, learners and their parent's choice whether to participate will not advantage or disadvantage them in any way. There are no negative consequences for non-participation. If they do choose to participate, we will respect all participants' right to privacy, safety from harm and confidentiality. We will ensure that all interview transcripts and video recordings are used anonymously, with pseudonyms being given to all participants and schools. Confidentiality will be maintained in the recorded interviews and any detail that might identify a participant or the school will be omitted in any published and written data. If teachers choose to participate, they have the right to withdraw from participation at any time during the research process, with no negative consequences or penalty. They also have the right to decline to answer any of the questions asked in the interview. Similarly, the learners and their parents have the right to withdraw the learner's participation in the videotaping process at any time with no negative consequences attached. The lesson videotaping would still go ahead with the learner present but at no time will they then be filmed or recorded.

All data collected (including electronic and hard copies of interview transcripts and video recordings) will be kept securely in a locked cupboard in a locked office, and will be destroyed by shredding or deleting within three to five years after completion of the study. The results of the research will be used for academic purposes only. This includes my PhD research project, and possible publications in academic journal articles, books and conference presentations by myself, my supervisors or the NRF project leader (who is my supervisor). In any of these publications, we guarantee the participants' right to anonymity, and no names, institution names or any other identifying information will be used. There are no foreseeable risks in participating and teachers will not be paid for this study. There are also no direct benefits to teachers if they choose to participate but we would expect that participation in the research would provide an opportunity for reflection, and that the results of the study would further our collective understanding of schooling for diverse

learners. The research project has been cleared by the Human Research Ethics Committee (Education) of The University of the Witwatersrand [Protocol number: 2015ECE006D] and permission has been granted to conduct research by The Department of Education [Reference number: D2017/097].

If you are willing to give permission for research to be conducted at the school, please would you sign at the bottom of this form and return it to me as soon as possible. If you have any concerns or queries regarding my research, please do not hesitate to contact me or the project leader or one of my supervisors.

Thanking you in anticipation.

Mr. Douglas Andrews

Wits Student number: 9406366T

Protocol Number: 2015ECE006D

Project leader, Supervisor and NRF Grant holder

Dr.Elizabeth Walton

Supervisor

Prof Ruksana Osman

Principal permission for research granted:

Principals Name: _____ **Date: _____**

Principal signature: _____

Request to conduct research at the school: governing body

Wits School of Education

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Request to conduct research at [_____] School

Dear Sir/Madam

My name is Douglas Andrews and I am a PhD student at the Wits School of Education. My PhD study is part of a research project sponsored by the National Research Foundation (NRF). Dr. Elizabeth Walton is the NRF grant holder and my co-supervisor, together with Professor Ruksana Osman who is the Dean of the Humanities Faculty at WITS. Dr. Elizabeth Walton is also a Senior Lecturer in the School of Education at WITS. I know that teachers employ various practices in response to the needs of diverse learners. I am primarily interested in discovering what informs the teacher's inclusion practices. I am also interested in examining the extent to which teachers are informed by their university learning about inclusive education. I would like to request your permission and obtain your consent to conduct research at your school. To understand more about what inhibits or promotes teachers when responding to diverse learner needs I would like to invite two early career teachers in [school name] school to participate in this research project. (Suitability as a teacher candidate would be a teacher who teaches in the Intermediate Phase and is between his/her second and tenth year of their teaching career. The candidate teachers also need to be a SACE registered teachers who qualified with a four year teaching qualification or have completed a PGCE at a university in South Africa).

The first part of the teachers anticipated participation entails them responding to general, individual interview questions related to the inclusion pedagogies they employ in their teaching. This interview would take about 45 minutes and would be held at a place and time convenient to the teachers. With their permission, I would like to audio record the interview for accurate capture of the teachers' responses. The second component would involve my videotaping two (maximum) lessons and then conducting follow-up personal interviews where they can reflect on their application of inclusion pedagogy in each lesson. The videotaping of the lessons will include having the learners in the video recording, but the focus will be on the teacher practice, and written informed consent will be requested from the learners and their parents. The two reflective

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Participation is entirely voluntary and teachers, learners and their parent's choice whether to participate will not advantage or disadvantage them in any way. There are no negative consequences for non-participation. If they do choose to participate, we will respect all participants' right to privacy, safety from harm and confidentiality. We will ensure that all interview transcripts and video recordings are used anonymously, with pseudonyms being given to all participants and schools. Confidentiality will be maintained in the recorded interviews and any detail that might identify a participant or the school will be omitted in any published and written data. If teachers choose to participate, they have the right to withdraw from participation at any time during the research process, with no negative consequences or penalty. They also have the right to decline to answer any of the questions asked in the interview. Similarly, the learners and their parents have the right to withdraw the learner's participation in the videotaping process at any time with no negative consequences attached. The lesson videotaping would still go ahead with the learner present but at no time will they then be filmed or recorded.

All data collected (including electronic and hard copies of interview transcripts and video recordings) will be kept securely in a locked cupboard in a locked office, and will be destroyed by shredding or deleting within three to five years after completion of the study. The results of the research will be used for academic purposes only. This includes my PhD research project, and possible publications in academic journal articles, books and conference presentations by myself, my supervisors or the NRF project leader (who is my supervisor). In any of these publications, we guarantee the participants' right to anonymity, and no names, institution names or any other identifying information will be used. There are no foreseeable risks in participating and teachers will not be paid for this study. There are also no direct benefits to teachers if they choose to participate but we would expect that participation in the research would provide an opportunity for reflection, and that the results of the study would further our collective understanding of schooling for diverse learners. The research project has been cleared by the Human Research Ethics Committee (Education) of The University of the Witwatersrand [Protocol number: 2015ECE006D] and permission has been granted to conduct research by The Department of Education [Reference number: D2017/097].

If you are willing to give permission for research to be conducted at the school, please would you sign at the bottom of this form and return it to me as soon as possible. If you have any concerns or queries regarding my research, please do not hesitate to contact me or the project leader or one of my supervisors.

Thanking you in anticipation.

Mr. Douglas Andrews

Wits Student number: 9406366T

Protocol Number: 2015ECE006D

Project leader, Supervisor and NRF Grant holder

Dr.Elizabeth Walton

Supervisor

Prof Ruksana Osman

Principal permission for research granted:

Principal's signature: _____

Date: _____

SGB Chairman's signature: _____

SGB Chairman's Name: _____

Date: _____

Invitation letter to the principal to participate as a research participant on my study

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Invitation to participate in research and participant information letter

Dear Mr. _____

My name is Douglas Andrews and I am a PhD student at the Wits School of Education. My PhD is part of a research project overseen by Dr. Elizabeth Walton (Project leader) and Prof Ruksana Osman who are my supervisors. Dr. Walton is a senior lecturer in the Faculty of Education and Prof Osman in the Dean of the Faculty of Humanities. I know that teachers employ various pedagogical practices in response to the needs of diverse learners. I am interested in discovering more about how teachers draw upon their pre-service university learning about inclusive education and apply the pedagogy when creating inclusive learning environments in response to children with diverse learning needs. I am also very interested in finding out what environmental or other factors might inhibit or promote teachers from being effective inclusive educators in your school.

With permission to conduct my study in your school I would also like to invite you to participate in one semi-structured interview with me. The reason for this interview is to gain some insight into the unique dynamics of your school relating to class size, measures in place at a management level to cater to the diverse needs presented by the learner population at your school and strategies in place to address national inclusive education policies. This intended interview will with your permission be audiotaped with the intention of gaining a literal and accurate account of the conversation. If you agree to participate, the interview will be no longer than 45 minutes in length and to be held at a time and in a place of your convenience.

Participation is entirely voluntary and your choice whether to participate will not advantage or disadvantage you in any way. There are no negative consequences or institutional sanction for non-participation. If you do choose to participate, we will respect all participants' right to privacy, safety from harm and confidentiality. We will ensure that all interview transcripts are used anonymously, with pseudonyms being given to all participants. Confidentiality will be maintained in the recorded interviews and any detail that might identify a participant or their school will be omitted in any published and written data. If you choose to participate, you have the right to withdraw from participation at any time during the research process, with no negative consequences or penalty. You also have the right to decline to answer any of the questions asked in the interview.

All data collected (including electronic and hard copies of interview transcripts) will be kept securely in a locked cupboard in a locked office, and will be destroyed by shredding or deleting within three to five years after completion of the study. The results of the research will be used for academic purposes only. This includes my PhD research project, and possible publications in academic journal articles, books and conference presentations by myself, my supervisors. In any of these publications, we guarantee the participants' right to anonymity, and no names, institution names or any other identifying information will be used. There are no foreseeable risks in participating and you will not be paid for this study. There are also no direct benefits to you if you choose to participate but we would expect that participation in the research would provide an opportunity for reflection, and that the results of the study would further our collective understanding of schooling for diverse learners. The research project has been cleared by the Human Research Ethics Committee (Education) of The University of the Witwatersrand [Protocol number: 2015ECE006D] and permission has been granted to conduct research by The Department of Education [Reference number: D2017/097].

If you are willing to participate in the research project, please fill in the attached consent form. If you have any concerns or queries regarding my research, please do not hesitate to contact me or one of my supervisors.

Thanking you in anticipation.

PhD student: Douglas Andrews

Wits Student number: 9406366T

Protocol Number: 2015ECE006D

Project leader and supervisor:
Elizabeth Walton

Supervisor:

Ruksana Osman

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Research Project: The extent to which early career teacher's draw on their pre-service learning to respond to learner diversity and promote inclusivity in education

Informed Consent Form

I _____ (participant principal's full name)

am willing / am not willing*

to participate in the research project by being interviewed for this study in a 60-minute individual interview.

Permission to be audiotaped

I agree to be audiotaped during the interview	Yes/ No*
I know that the audiotapes will be used for this project	Yes/ No*
I know that I can ask not to be audiotaped	Yes/ No*

Please also indicate:

- I have read and understand the "Invitation to participate in research and information letter": Yes/ No*
- I understand that my participation is voluntary and that there are no negative consequences for choosing not to participate in this research: Yes/ No*
- I understand that I may withdraw my participation at any time without any negative consequences: Yes/ No*
- I understand that I can stop the interview at any time with no negative consequences to me: Yes/ No*

- I understand that I have the right to decline to answer any of the questions during the interviews and that there would be no negative consequences to me: Yes/ No*
- I know that the researcher and supervisors will keep my information confidential and safe and that my name and the name of my school will not be revealed: Yes/ No*
- I understand that the responses I give during the interviews will be used as research data for academic purposes, and may be published in conference papers, journal articles or books: Yes/ No*
- I understand that the responses I give during the interview may form part of a larger data set to be used by the project leader (Dr. Walton) or my supervisors to investigate the extent to which selected school and classroom practices that respond to learner diversity promote inclusivity in schools: Yes/No*
- I understand that my responses will be used anonymously at all times and I will not be identified in any research publications: Yes/No*
- I understand that the data will be kept securely in a locked office and will be destroyed within three to five years after completion of the research: Yes/ No*

Signature: _____ Date: _____

*Please circle your response

Letter of permission for interviews and lesson observations: teacher participants

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Invitation to participate in research and participant information letter

Dear _____

My name is Douglas Andrews and I am a PhD student at the Wits School of Education. My PhD is part of a research project overseen by Dr. Elizabeth Walton (Project leader) and Prof Ruksana Osman who are my supervisors. Dr. Walton is a senior lecturer in the Faculty of Education and Prof Osman in the Dean of the Faculty of Humanities. I know that teachers employ various pedagogical practices in response to the needs of diverse learners. I am interested in discovering more about how teachers draw upon their pre-service university learning about inclusive education and apply the pedagogy when creating inclusive learning environments in response to children with diverse learning needs. I am also very interested in finding out what environmental or other factors might inhibit or promote teachers from being effective inclusive educators. As a practicing teacher, you are ideally positioned to comment on this, and so to understand more about the ways in which teachers respond to diverse learner needs. I would like to invite you to participate in my research project. Voluntary participation would entail responding to questions about your experiences of inclusive education practice first, in an individual interview. This general interview would take about 45 minutes of your time and would be held at a place and time convenient to yourself. With your permission, I would like to audio record the interview for accurate capture of your responses.

The second request is that you allow me to videotape a maximum of two of your teaching lessons in order for me to see how you go about addressing the diverse learning needs that you may be presented with in your class. The reason to videotape the lessons is that I would like to do follow up interviews where we can discuss the contents of the recording in open-ended interviews. These two follow up interviews will be about 45 minutes in length and would also be held in a place and at a time that is totally convenient to you. For both of these interviews, that would follow the lessons videotaped, you will be provided, in advance, with the interview schedule in order that you can familiarise yourself with the questions. These lesson observation and interviews will be conducted six months apart within an academic year. Finally, I would like to ask permission

for you to provide me with copies of your lesson plans and assessment materials for me to conduct a content analysis.

Participation is entirely voluntary and your choice whether to participate will not advantage or disadvantage you in any way. There are no negative consequences or institutional sanction for non-participation. If you do choose to participate, we will respect all participants' right to privacy, safety from harm and confidentiality. We will ensure that all interview transcripts are used anonymously, with pseudonyms being given to all participants. Confidentiality will be maintained in the recorded interviews and any detail that might identify a participant or their school will be omitted in any published and written data. If you choose to participate, you have the right to withdraw from participation at any time during the research process, with no negative consequences or penalty. You also have the right to decline to answer any of the questions asked in any interview.

All data collected (including electronic and hard copies of interview transcripts, copies of videotaped lessons and copies of lesson plans and assessment materials) will be kept securely in a locked cupboard in a locked office, and will be destroyed by shredding or deleting within three to five years after completion of the study. The results of the research will be used for academic purposes only. This includes my PhD research project, and possible publications in academic journal articles, books and conference presentations by myself, my supervisors. In any of these publications, we guarantee the participants' right to anonymity, and no names, institution names or any other identifying information will be used. There are no foreseeable risks in participating and you will not be paid for this study. There are also no direct benefits to you if you choose to participate but we would expect that participation in the research would provide an opportunity for reflection, and that the results of the study would further our collective understanding of schooling for diverse learners. The research project has been cleared by the Human Research Ethics Committee (Education) of The University of the Witwatersrand [Protocol number: 2015ECE006D] and permission has been granted to conduct research by The Department of Education [Reference number: D2017/097].

If you are willing to participate in the research project, please fill in the attached consent form. If you have any concerns or queries regarding my research, please do not hesitate to contact me or one of my supervisors.

Thanking you in anticipation.

PhD student: Douglas Andrews

Wits Student number: 9406366T

Protocol Number: 2015ECE006D

Project leader and supervisor
Elizabeth Walton

Supervisor

Ruksana Osman

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Research Project: The extent to which early career teacher's draw on their pre-service learning to respond to learner diversity and promote inclusivity in education

Informed Consent Form

I _____ (participant's full name)

am willing / am not willing*

to participate in the research project by being interviewed for this study in a 60-minute individual interview and to have two of my lessons videotaped and then participate in follow up interviews at a time and place convenient to me.

Permission to be audiotaped

I agree to be audiotaped during the three interviews	Yes/ No*
I know that the audiotapes will be used for this project	Yes/ No*
I know that I can ask not to be audiotaped	Yes/ No*

Permission to be videotaped

I agree to be videotaped during two separate lessons	Yes/ No*
I know that the videotapes will be used for this project	Yes/ No*
I know that I can ask not to be videotaped	Yes/ No*

Please also indicate:

- I have read and understand the "Invitation to participate in research and information letter": Yes/ No*

- I understand that my participation is voluntary and that there are no negative consequences for choosing not to participate in this research: Yes/ No*
- I understand that I may withdraw my participation at any time without any negative consequences: Yes/ No*
- I understand that I can stop the interview or lesson observation and videotaping at any time with no negative consequences to me: Yes/ No*
- I understand that I have the right to decline to answer any of the questions during the interviews and that there would be no negative consequences to me: Yes/ No*
- I know that the researcher and supervisors will keep my information confidential and safe and that my name and the name of my school will not be revealed: Yes/ No*
- I understand that the responses I give during the interviews and researcher observations form the two lessons observed will be used as research data for academic purposes, and may be published in conference papers, journal articles or books: Yes/ No*
- I understand that the responses I give during the interviews and videotaped lessons may form part of a larger data set to be used by the project leader (Dr. Walton) or my supervisors to investigate the extent to which selected school and classroom practices that respond to learner diversity promote inclusivity in schools: Yes/No*
- I understand that my responses will be used anonymously at all times and I will not be identified in any research publications: Yes/No*
- I understand that the data will be kept securely in a locked office and will be destroyed within three to five years after completion of the research: Yes/ No*

Signature: _____ Date: _____

*Please circle your response

Permission to conduct research letter: parents' consent for participation for their children to be observed in a lesson by the researcher

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Invitation to participate in research and participant information letter

Dear parent/guardian

My name is Douglas Andrews and I am a PhD student at the Wits School of Education. I intend to conduct research in your son/daughter's school where I will be conducting interviews with their teachers and videotaping two of their lessons in which your child is a class member. My PhD is part of a research project overseen by Dr. Elizabeth Walton (Project leader) and Prof Ruksana Osman who are my supervisors. Dr. Walton is a senior lecturer in the Faculty of Education and Prof Osman in the Dean of the Faculty of Humanities. The aim of my research project is to find out information regarding how teachers employ various teaching practices in response to the needs of diverse learners. I intend to videotape a maximum of two of their lessons in order to observe authentic examples where teachers apply strategies to include children with divers learning needs.

While observing your child's teacher directly in the videotaped lessons your child will be indirectly involved as a participant. As a result, their image will appear in my videotaping and any interactions they might have with the teacher will be video-recorded, together with any audio response. Just to reiterate the primary aim of my project is to observe teachers' teaching and examine what skills and knowledge they apply specifically when addressing the diversity of learning needs they encounter on a daily basis. I would like to invite your child to be part of my study by being a participant in the class when I film the lessons.

Your child's participation is entirely voluntary and your choice whether to give permission to allow your child to participate will not advantage or disadvantage him/her in any way. There are no negative consequences or institutional sanction for non-participation. If you do choose to allow your child to participate, we will respect your child's right to privacy, safety from harm and confidentiality. We will ensure pseudonyms are given to all participants including the children who are part of the class videotaped. Confidentiality will be maintained and

any detail that might identify a participant or their school will be omitted in any published and written data. If you choose to allow your child to participate in the videotaped lesson you have the right to withdraw him/her from participation at any time during the research process, with no negative consequences or penalty. If you do not grant permission for your child to participate in my study he/she will still be part of the lesson but at no time will the camera film him/her or will his or her voice be part of any audio recording.

All data collected for my study (including electronic and hard copies of interview transcripts and copies of videotaped lessons) will be kept securely in a locked cupboard in a locked office, and will be destroyed by shredding or deleting within three to five years after completion of the study. The results of the research will be used for academic purposes only. This includes my PhD research project, and possible publications in academic journal articles, books and conference presentations by myself, my supervisors. In any of these publications, we guarantee the participants' right to anonymity, and no names, institution names or any other identifying information will be used. There are no foreseeable risks in participating and you will not be paid for this study. There are also no direct benefits to you if you choose to allow your child to participate but we would expect that the teachers participation in the research would provide them an opportunity for reflection, and that the results of the study would further our collective understanding of schooling for diverse learners. The research project has been cleared by the Human Research Ethics Committee (Education) of The University of the Witwatersrand [Protocol number: 2015ECE006D] and permission has been granted to conduct research by The Department of Education [Reference number: D2017/097].

If you are willing to allow your child to participate in the research project, please fill in the attached consent form. If you have any concerns or queries regarding my research, please do not hesitate to contact me or one of my supervisors.

Thanking you in anticipation.

PhD student: Douglas Andrews

Wits Student number: 9406366T

Protocol Number: 2015ECE006D

Project leader and supervisor
Elizabeth Walton

Supervisor

Ruksana Osman

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Research Project: The extent to which early career teacher's draw on their pre-service learning to respond to learner diversity and promote inclusivity in education

Informed Consent Form

I _____ (participant's parent's full name)

am willing / am not willing*

to allow my son/daughter to participate in the research project as a member of two separate lessons that are being videotaped by me in the capacity of the researcher.

Permission to be audiotaped

I agree to allow my child to be audiotaped during the observed lessons	Yes/ No*
I know that the audiotapes will be used for this project	Yes/ No*
I know that I can ask that no recordings of my child's vice be audiotaped	Yes/ No*

Permission to be videotaped

I agree to allow my child to be videotaped during the observed lessons	Yes/ No*
I know that the videotapes will be used for this project	Yes/ No*
I know that I can ask that no videotaping of my child take place	Yes/ No*

Please also indicate:

- I have read and understand the "Invitation to participate in research and information letter": Yes/ No*
- I understand that my participation and that of my child is voluntary and that there are no negative consequences for choosing not to participate in this research: Yes/ No*
- I understand that I may withdraw my permission for my child to participate at any time without any negative consequences: Yes/ No*
- I know that the researcher and supervisors will keep my information confidential and safe and that my name, my child's name and the name of my school will not be revealed: Yes/ No*
- I understand that the researcher's observations form the two lessons observed will be used as research data for academic purposes, and may be published in conference papers, journal articles or books: Yes/ No*
- I understand that the video recordings of the lessons where my child will be a participant may form part of a larger data set to be used by the project leader (Dr. Walton) or my supervisors to investigate the extent to which selected school and classroom practices that respond to learner diversity promote inclusivity in schools: Yes/No*
- I understand that my responses or my child's responses will be used anonymously at all times and I will not be identified in any research publications: Yes/No*
- I understand that all data including the data will be kept securely in a locked office and will be destroyed within three to five years after completion of the research: Yes/ No*

Signature: _____ Date: _____

*Please circle your response

Permission to conduct research: learners' permission to be observed in the lessons

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Invitation to participate in research and participant information letter

Dear [learner's name]

My name is Douglas Andrews and I am doing a study that looks at how teachers help all children with their learning while in class. I am doing this investigation as part of my Doctorate Degree that I am studying at the University of the Witwatersrand. Your principal [name of principal] has given me permission to do this study at your school.

I would like to invite you to be a very special part of my study. Finding out how teachers help children learn will help many other school children of your age in other schools improve their learning.

This letter is to explain to you exactly what I would like to do. There may be some words or sentences that you don't understand in this letter. You may ask me, your parents or your teacher to explain to you any words you don't understand. You may take this letter home with you to think about my invitation and talk to your parents about this before you decide if you want to be a part of my study or not.

What I would like to invite you to do

I would like to film your class for two 60 minute lessons to see how your teacher teaches the children. I am going to concentrate on what your teacher will be doing in the lesson and will not be directly filming you. All I will be doing is setting up the camera and the recording equipment at the back of the class to film the lesson. I will not be asking any questions of you or of your teacher.

I am going to write a report on what I see on the video recording of your teacher's lesson but I will not use your name in the report or say anything that will let people know who you are. You do not have to be part of my study if you don't want to. Deciding not to be part of my study will not harm

you in any way. This lesson filming is not for marks. If you do decide to be part of my study you can stop taking part at any time. Being part of my study will not benefit you but my results will help many other teachers in other schools to be better teachers.

If you decide to be part of my study, you will be asked to sign the form on the next page and let me know if you understand what this letter says by ticking the boxes in the table. If you have any other questions about this study you can talk to me or have your parents/guardians phone me.

Do not sign this form until you have fully understand what it is that you will be part of and until you have all your questions answered.

Douglas Andrews Phone Number 079 877 8751

Protocol Number: 2015ECE006D

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Research Project: The extent to which early career teacher's draw on their pre-service learning to respond to learner diversity and promote inclusivity in education

Informed Consent Form

I _____ (learner participant's full name)

am willing / am not willing*

to participate in the research project by being videotaped (filmed) during two selected lessons at a time and place convenient to me.

Permission to be videotaped

I agree to be videotaped and recorded in the two lessons	Yes/ No*
I know that the videotapes and voice recordings will be used for this project only	Yes/ No*
I know that I can ask not to be videotaped or recorded	Yes/ No*

The table below has some sentences for you to respond to about whether you understand fully what it is that I would like you to do in my study.

Read each sentence in the table and then choose **YES** or **NO**

If all the choices are **YES** and you sign the form at the bottom of the page I will include you in the filming of the four lessons with your teacher.

Put a tick in the YES or a tick in the NO box.

NO	QUESTIONS	YES	NO
1	I have read the letter and understand what the study is about and if I did not understand any words or sentences I asked an adult to explain.		
2	I know that my participation is totally voluntary and it is my choice to be filmed in two of my lessons.		
3	I understand that if I don't want to be a part of the study I don't have to and choosing not to be a part will not get me into trouble. Also this does not count for marks and cannot affect my grades.		
4	I understand that even if I agree to be a part of the study I can ask to be not included at any time.		
5	I know that my name, my teacher's name and the name of my school will be kept a secret and will never be written down in any report.		
6	I understand that all that will be happening is that a camera will be used to watch my teacher teach a lesson that I am a part of.		
7	I know that Douglas Andrews will keep all the recordings safely locked away in a cupboard to keep the information confidential.		
8	I give my permission to be included in the lessons that are videotaped.		

I have read this letter which asks me to be a part of a study at my school. I have understood the information and ticked the boxes in the table.

Learner's name: _____

Learner's signature: _____

Date: _____

Researcher's name: Douglas Andrews

Researcher's signature: _____

Date: _____

APPENDIX 6: LESSON OBSERVATION SCHEDULE FOR TEACHER PARTICIPANTS:

Lesson introduction and organisation	• The respondent introduced the lesson in a positive manner and gained all the children's attention with leading questions linked to their known knowledge and personal interests. • Evidence shows that the teacher has planned accordingly and has spent time getting to know the interests of every learner. • The teacher articulates the outcomes of the lesson clearly to the learners in a step-by-step manner that makes sense to all. • The teacher is prepared for the lesson with all materials and media necessary. • The lesson starts smoothly and progresses directly to the intended learning activities.
Lesson planning for inclusive teaching	• The teacher has planned a lesson that considers the challenge of meeting the range of different learning needs that are present in the classroom. • The lesson is in line with the guidelines set out by the national curriculum. • Lesson planning is evident in the classroom on the teacher's desk or on the computer.
Gaining trust from the learners	• The respondent makes consistent eye contact with the learners and takes time to ensure that all the learners are focused on the activities or the introduction to the lesson. • The teacher makes an effort to discuss daily events with the learners and consider their environmental stress factors. • The teacher shows that he/she is empathetic towards the variety of personal or environmental circumstances that can be a barrier to learning. • The teacher is warm and inviting to the learners and makes an effort to create a positive and inclusive classroom environment.
Presentation of the lesson.	• The teacher is aware of the different learning needs of the children in the class and adjusts the pace of the lesson and the types of activities accordingly. • The teacher sets lesson tasks that are attainable by the children and interesting for all the learners. • The teacher takes time to ensure that all learners are on task and able to contribute to their own learning. • The respondent is able to monitor the pace of the lesson to obtain the set objectives within the time frame of the lesson.

	• The teacher circulates around the class and communicates with every child in a meaningful manner.
Evidence of inclusive teaching instructional practices	• The observer records use of any instructional practices that are in line with those of inclusive teaching. • The teacher uses teaching techniques that are applicable to all the learners, not most at the expense of some. • These include: differentiated instruction; direct instruction; peer-peer learning or co-operative learning and work choice or play zone. • The teacher is able to use a variety of different instructional practice techniques in the lesson in an attempt to gain maximum participation of every child. • The teacher constantly checks for understanding of what he/she is teaching and of the content of the lesson activities. • Instructions to lesson activities are clear and concise and not too wordy or confusing.
Observation of teaching that encourages social interaction between learners.	• The teacher encourages the use of cooperative group work strategies where learners can incorporate social learning opportunities into their lesson activities. • The teacher promotes opportunities for productive interpersonal communication between learners.
Classroom rules management	• The teacher uses a variety of positive discipline techniques to maintain a productive working environment and guide learner behaviour and attitudes. • The teacher is conscious of how the learners relate to each other and he/she promotes a climate of tolerance and mutual respect for difference.
Assessment methods aligned with the ideas of inclusive teaching	• The teacher uses a variety of summative and formative assessment materials that consider the range of learner differences that are present in the class. • These assessment materials include rubrics that outline and clearly communicate the academic expectations of the assessment given in a manner that is accessible for all learners in the class. • The teacher provides feedback to the learners on their work.
Conclusion to the lesson	• The teacher reinforced the main concepts of the lesson to the class and reflected on the challenges and opportunities that the lesson presented. • The teacher reinforced any new vocabulary learned about the topic taught and linked this to the interests and known knowledge of the learners.
Reflection on inclusive teaching evident in the lesson.	• At the conclusion of the lesson the teacher reflected on what instructional practices were successful and which were not.

	• The teacher identifies any reinforcement of ideas or content that might be necessary in a follow up lesson. • The teacher reflects on issues that include: effectiveness of social learning strategies; cooperative learning opportunities and their direct instruction. Adjustments are made for future lessons

APPENDIX 7: EXAMPLE OF A CODING TABLE

Extract of the raw coding of responses to questions presented to the principal of Riverbend Primary school.

Extracts from transcripts	Codes
D: Okay, thank you. What, if any, provisions are in place to address the pedagogical practices to equip teachers to teach a diverse class or learners with different learning needs?	
P: Um, I think as far as the teachers are concerned, obviously specialised training might be necessary where they are, where they, they, they are helped to cater for children with needs that might be outside of the norm that they were trained for at university or teachers' training college. Obviously they would have to learn new skills and do reading on new approaches to education that would change what they have been doing in the past. Um, as far as pupils are concerned, I think a huge asset to have these children in the class with them would be to teach the children about tolerance and respect so that they can understand that everybody in the world is not like them, that there are children who have challenges and that they learn to respect those challenges and understand and tolerate individuals who are in their class with them.	Special needs thinking. Medical deficit model. Bell curve thinking. Underprepared for inclusive teaching. Specialised training. Tolerance for diversity. Human rights. Tolerance for diversity.
D: Okay, thank you. Please elaborate on any school-based strategic management plan that is in existence to provide practical measures to cope with learner diversity and different learning needs?	
P: Um, at my school I think we are inclusive to a certain degree in that children with physical disabilities are included in our system as long as they are academically able to cope with the standards that we set, being a school that is earmarked to cater for average to above average pupils on the academic side. Um, I think that is quite a challenge but children who are able to handle the academic challenges, and when I say that it's not only to get 70% or 80% - our system is one that requires the core subjects to have less period allocation because of the options that we have. The have option music, option drama, as you know, option art etc. Those periods have to be taken away from Maths and English and Afrikaans and Science and History and Geography, so the children have to be able to cope with the amount of work and the standard of work in fewer periods. And so it is quite a challenge to the normal academic child, if I can put it that way. And so where children with disabilities are able to cope with that academic standard we try to include them in our school community, but obviously where a child is needing extra help academically we don't really have the resources, the staff or the time to become fully inclusive.	Degrees of inclusion. Support for physical disabilities. Bell curve thinking. Academic focus. Enrichment subjects. Limited time allocation for core subjects. Focus on academic outcomes. Bell curve thinking. Non-inclusive classrooms, limited resources.
D: What additional human and physical support measures or resources are at your disposal in the school to address the needs of a diverse population of learners?	
P: Ja, I think that at this school, - we have fairly recently set up support units for children who come into our system who need to be assisted – from ADHD children to children needing extra lessons in the afternoons, to be taken out of class to need academic support, as well as more formal, even where children come in with Tourette syndromes and	External support provision. Medical model. Child removed from class for support.

aspects like that where we have set up units with staff who are specially trained. At this school we have a permanent staff of about 5 on our staff who are dealing with these children on an individual basis every day. Also going into the classroom to give advice to the teachers on how to deal with these children in a setup where you have 25 children sitting in front of you – how to cater for them. So I do think a lot of accent is being placed on this aspect in general and very definitely from what I have seen in the last month that I have been here, at this school as well, who I think we've, we've hired some really good staff in the accelerated learning centre as we call it. We don't only focus there on children who have problems catering with the, coping with the academic standards, but we are also trying to get the brighter children to come in and extend and enrich their programme as well, in the learning centre, as well as in the classroom and give advice to teachers how to do that. So I think we are coping very well although obviously I think things are gonna change a lot in the coming years and I'm quite excited about the way that we, that we're going to cater for these children and make our schools more inclusive, especially on the side where we can extend children. D: How is inclusive teaching reviewed or evaluated during teacher lesson observations and performance appraisals? P: Um I don't think they are specifically observed. I don't think we, I don't think anybody on the management team actually goes into classrooms with the mission to go and observe how our inclusivity programme is working.	Medical deficit labels. External support staff. Specialist advice for teachers. Limited management support. Promotes support staff. Medical model. Function of the external support centre. Specialist advice given. Optimism. Predicts future change towards inclusion. Classroom observations not prioritised. Limited management support for inclusive teaching.