PRESCHOOL TEACHERS’ BELIEFS OF DEVELOPMENTALLY APPROPRIATE EDUCATIONAL PRACTICES

Rose Cheptoo Ruto-Korir

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PRESCHOOL TEACHERS’ BELIEFS
OF DEVELOPMENTALLY APPROPRIATE
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by

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PHILOSOPHIAE DOCTOR
(LEARNING SUPPORT, GUIDANCE AND COUNSELLING)

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2010

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DECLARATION BY THE CANDIDATE

I declare that “Preschool teachers’ beliefs of developmentally appropriate educational practices” is my original work and has not been previously submitted by me for a degree in any other university. No part of this work can be copied without the permission of the author and/or the University of Pretoria

Rose Cheptoo Ruto-Korir

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Signature

Signed on ______ day of_______________, 2010, Pretoria, South Africa

DECLARATION BY THE SUPERVISORS

The candidate has submitted the thesis for examination with our approval as university supervisors.

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Prof. Irma Eloff
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Signature

Signed on ______ day of_______________, 2010, Pretoria, South Africa
DEDICATION

Primarily, I dedicate this thesis to God almighty, without whose origin of wisdom, knowledge and sustenance, my human pursuits would be in vain.

Secondly, I dedicate this thesis to my late father and cherished friend Moindi Arap Ruto, who believed in me and is ever so perpetually present in spirit to light my life’s path.

Thirdly, I dedicate this thesis to you my dearest friend and husband, Eliud Kipkemboi Korir, for your fountain of humour and generosity, which sometimes defies human logic. El, where could I get such a valuable friend as you? You so much dream and support my dreams...our dreams...I cannot ask for more.

Fourthly, to my sons Kiplimo and Kiprotich Kemboi, your remote motivation kept me going, even when the spirit was willing but the flesh was weak. I dedicate to you sons that you may always learn through my experience that in life sacrifice begets a higher good.

Lastly, I dedicate this to you my mother Bot Barno Chepkosgei Moindi. Regardless of your “non-formally-schooled” circumstances that you will never ‘access’ to read this acknowledgement, kor’ge your immense struggles in life, which go beyond this demand, kept papa’s vision alive culminating into this achievement. You made your lived responsibility so vivid in our minds through the ‘floating beans’ and the ‘pumpkin leaves’, as an epitome of true commitment to your call to motherhood. You are a living testimony of a mother’s unconditional true love that has always warmed my heart.
ACKNOWLEDGEMENTS

Many individuals and institutions have made the success of this work possible. I wish to thank, with insurmountable gratitude my employer, Moi University and the German Academic Exchange Programme (DAAD), for the financial support that enabled me to pursue these studies. I also thank the University of Pretoria for awarding me the bursary that supplemented my studies, and to my family for supporting my residential stay in Pretoria.

To you my supervisors Dr. Carien Lubbe-De Beer and Prof. Irma Eloff, I thank you for enduring my academic errors and for leading me to the present achievement. Your patience and hard work throughout the progress of my work was particularly impressive. ‘Daktari’, I am grateful for your motivation and for all the little stars. You could not have done it better my “Daktari”. For the many hours we spent together making sense of each piece that makes this work what it is, please accept my gratitude for accepting to work beyond the office boundaries and hours. It was a privilege for me to have you as my very dedicated intellectual pillar. In our interactions, I have learnt many lessons, no doubt, that in diversity there is enormous human strength.

Professor Irma Eloff, etched in my memory will always be your fountain of energy, which you put to use in improving this work each step of the way, even when your administrative duties increased. Your impeccable thoroughness and attention to detail not only shaped this work, but it also imprints in me the epitome of the scholar that you embody. Your little stars and emoticon stickers, I admit, defies age as their presence in the feedback engendered me to do just one more sentence. Your strategy of ‘fishing me out’, with that ‘sms’ no doubt reduced our psychological distance!

To both of you, I behold your expediency in responding to my work, which not only kept me running, but which also made my progress swift. Undeniably, you both transformed me, not only academically, but also, as a professional whose impact I hope will live beyond this thesis. Gratitude is due to Prof. Jonathan Jansen for teaching me critical thinking, and to all lecturers in the Educational Psychology department, for their critical comments at the beginning of this journey. More so, my gratitude to Prof. Liesel
Ebersöhn for coining the term ‘silence’ of materials as one of my themes for data analysis. Thank you too, my preschool teacher Elseba Chemaiyo, for making my own childhood educational experience so vivid, several years later, and which has become part of the experiences entrenched in this thesis.

To the teachers, children and their parents who participated in this study, I thank you, because without your willingness and co-operation, this work would not exist. My appreciation also extends to Jackson Kiptiony for his technical advice and assistance during my data collection period, to Meshack Tarbey for transcribing my data and to Adrie Van Wyk for her superb technical editing assistance.

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The many moments of uncertainty and the immense demands of a PhD will always remain an indelible part of the progress of this work. Many friends and colleagues, classmates and other graduate students, made my journey worthwhile. I share the joy of getting this far with my cherished long time friends, Lucy and Jason Kap-Kirwok and Scolly and Jeremiah Tomno, thank you for friendship, and for believing in me and for cheering me to the end. Anne Mason (PhD), for orientating me to Pretoria, and to Teresa Ogina (PhD), for being a sister away from home, Maximus Monaheng Sefotho, for friendship, critical reading and for challenging my intellect. To Meeok Cho, Onyanja Bosire (PhD), Jane Sethusha and Hayley Barnes, thank you for your beautiful hearts that made my stay in Pretoria homey.

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John Maxwell says, “The road to the next level is always uphill!” It is on such great psychological pillars that I set my gaze in search for that light… no matter how dim the circumstances sometimes became. Thank you all for travelling this road, one or the other way with me. I will always remain indebted to you all.

To you all, in my mother’s language and culture, a passionate blessing, accompanied with a little saliva spit, would be uttered thus - “Sere!”
ABSTRACT

Teachers’ beliefs are central to determining children’s optimal educational experiences. However, some studies related to teachers’ beliefs yielded findings that rendered beliefs and practices incongruous. Although the principles of developmentally appropriate practices that synthesize theoretical and empirical research on child development have been adapted to various contexts other than its original United States of America (USA) context, developmentally appropriate practices remain contentious as to its relevance in these contexts. What is appropriate for children’s education seems debatable, largely determined by social expectations of childhood and children. Cultural diversity seems to be the new dispensation in this discourse. Fundamentally, research on preschool teachers’ beliefs about developmentally appropriate educational practices, adds to literature about cultural context variables in preschool provision from different contexts.

Purpose: This study examined how teachers’ practical experiences framed their beliefs and understanding of children’s educational experiences within a developmentally appropriate framework and a bioecological systems theory.

Paradigm/Design/Methods: A constructivist paradigm within the qualitative approach guided this study. Video and photographs became the basis to elicit teachers’ beliefs about children’s educational experiences. Children’s educational experiences were analysed along five constructs related to the concept of DAP; teaching strategy, use of materials, scheduling of children’s learning, assessment, and consideration of children’s individuality.

Findings: Teachers’ beliefs corroborated the DAP framework, but their practices that were more teacher-directed, contrasted the DAP principles. They used formally structured teaching approaches, as materials in three-out-of-four classes observed remained ‘silenced’. The schedules were formally structured, subject-based, with limited flexibility, as assessment for children’s learning focused on limited aspects of the cognitive domain.

Conclusion: Teachers’ beliefs seemed to support educational practices that embrace the principles of DAP. However, some context-related factors, which include pressure from parents, competitive school environments, preparation for the interview, different transition
requirements, peer pressure, and perceived lack of time limited their use of DAP. I extrapolate these factors to the bioecological systems theory, to understand the dynamics of early childhood education provision in Kenya.

**Practical implications/Originality/Value:** This study adds to literature on teachers’ beliefs about children’s educational experiences from a developing country context, as well as adding to studies that have used visually elicited interviews. It also provides the details of children’s educational experiences, in part, to appreciate the current conversation on the status and the nature of focus on standards or skills-based dynamics in preschool provision. Besides, it might be the first study in Kenya to embrace the DAP framework and the bioecological systems theory. The seesaw model advanced in this study synthesizes the originality of the study by conceptualizing the theoretical as well as empirical literature on developmentally appropriate educational practices, as a valuable framework to understand and interpret competing priorities that might affect preschool provision. The seesaw model is also valuable in locating and extending the conversation about different stakeholders’ priorities, not only in Kenya, but also in other societies.

**KEY WORDS**

Teachers’ beliefs; developmentally appropriate practices; use/and or silencing of materials; pressure for academics; preschool seesaw model; bioecological systems theory; childhood education and culture.
THE PROLOGUE

“Our map or representation of the world is also shaped by our personal history-our experiential finger print” (Badenhorst, 2007: xiii).

By linking ECE goals to culture, Klein and Chen (2001:6) acknowledge the dynamism of cultural values, preferences and practices. As part of this social cultural link, in the following section, I position myself and the emerging interest in the study. I juxtapose my own preschool experience many years ago with that of my son years later, to appreciate how the changing social expectations, even within the same social context, is a dynamic process that influences children’s educational experiences. As an academic, I locate the topic that I investigate and myself within the intellectual debates among colleagues, as part of scholastic engagements in academia, to provide a synopsis of how scholarship might be entrenched in personal experiences.

Moreover, through such reflexivity we appreciate how certain practical issues, for example the topic under investigation, can be severely limited if engaged as a theoretical rather than a practical issue that requires tangible solutions to a problem in society. Therefore, the topic of preschool teachers’ beliefs and children’s educational experiences emerged to me as more than an intellectual issue to engage for its own sake. It is a practical problem requiring more than cursory personal experiences or intellectual remarks.
Overall my position in the research as presented in this section is not limited to the genesis of the topic as I present here, but I will also position myself in the next chapters, including locating myself in the paradigm framework, the methods used in the data collection, and the data analysis and interpretation framework. This is not only a significant prerequisite to understand my choice of the research topic, but also the entire research process.

**In the beginning**

I grew up in a typical rural village where not only was going to nursery school optional, but also where parents could exercise discretion on whether to send their children to school. Growing up in a pastoral community privileged my childhood with opportunities to mind my younger siblings, and to shepherd the family’s calves, goats and sheep. I grew up as a “tom boy” sandwiched between three brothers. Although we considered herding a tedious task, it was part of the process of gauging responsibility and readiness for school. This was salient community-prescribed child labour, prior to school enrolment during and beyond childhood.

My memory about my first day at school is vivid. In particular, I recall the intense apprehension that I felt about school. My hesitant moments on my first day, perhaps about meeting new people in a new environment, is equally vivid. I cannot remember the exact reasons for my apprehension; however, I do still remember how one of my elder sisters deposited me in the preschool class, gave me a few directions and orientations and
disappeared. I did not cry, even though the urge to do so was so strong.

What does remain etched in my memory is the attractive classroom with aging red, blue, green, and yellow wooden board chairs and tables that must have been a donation, since this was a public school started by Roman Catholic missionaries. Later, when the furniture aged, locally made wooden ones replaced them. I cannot remember more details about what happened in the few weeks following my entry to school.

Later, as I progressed through the nursery school the detailed level of activities remains equally vivid. Our teacher was so gentle, so understanding and so playful. We enjoyed her company while we played with mud, ostensibly pouring copious amounts of water on the earthen access road to the primary school, which crossed the nursery school compound. However, in my quiet moments, privately, I used to wonder why ‘teacher’ would play with us. Even though I wondered, I never asked … but now I know.

Apart from vast playtime, the only writing activity I remember was pattern writing and drawing, which did not require us to take work home. Pattern writing remains an indelible part of my learning journey because I could not turn my hand to write the ‘S’ pattern. Instead, since they were a series of joint-Ss, I developed a strategy of writing a series of attached number 8888’, that I then joined from the base to form a semblance of the ‘S’ pattern. Although the difference between the conventional ‘S’ pattern and my invented pattern must have been evident, the teacher accepted
my limitations. For me, these were moments of surrender, when no
effort except perhaps maturity or practice would make me write
the “S” pattern. For the teacher to accept my limitations at such
times it gave me immeasurable relief from inescapable frustration
during the learning day.

As the lunch hour beckoned, we all sang our favourite age-old song
of faith; ‘Naskia sauti, sauti ya mama, sasa ni saa sita chakula
tayari, kwaheri mwalimu, kesho tutaonana’ (I can hear mama’s
voice, now it is noon, food is ready, goodbye teacher, we shall see
each other tomorrow). For us then, it was all joy as we ran home
for more fun as we herded goats and sheep in the plains, eating
wild fruits and roots. We also engaged in turns with various
simulated roles of ‘mother’, ‘father’, ‘children’, took ‘cattle’
[simulated by labotik- a wild inedible fruit] to the ‘dip’. We also
‘cooked’ using soil and ‘water’ [you can only imagine where the
water came from!]. Even though we went to school during morning
hours, we had no extra schoolwork at all.

However, that was a long, long time ago …
My childhood in different times …Same place…

Then, years later… a wandering spirit

Years later, a personal encounter that made me reflect on early
childhood education in Kenya prompted this inquiry. Born out of a
personal concern, as I observed and helped our son with
assignments at only four years of age, and attending a Montessori
preschool, I began an odyssey of self-introspection. I had been
teaching a Developmental Psychology course at the University, as
I had also previously been involved in the parents’ board of a Montessori preschool. Therefore, my introspection and a critical reflection of what it means to attend preschool in Kenya grew intense with the passage of time.

In my odyssey, more as a parent than as an academic, I consciously sought parents’ own opinions and expectations of the role of the preschool. While some parents seemed to argue for an academic focused curriculum to prepare children to pass the entry examination to standard one, others seemed to favour a nested approach where the child could engage in skills-based learning, with opportunities to play.

In a University cafeteria, I sat one afternoon for lunch with colleagues, one of whom had just returned from her PhD studies in Germany, with her daughter attending primary school in Kenya. I raised the issue of homework for preschoolers. My colleague had privately been battling over the homework issue for her daughter who was about seven years old attending standard two (the second year of primary school). She could not understand why her daughter came home with so much work at her age. According to her, the Kenya system of education was more demanding than the German school system, which her daughter had first experienced. As we continued to discuss the practices that surround children’s education in Kenya, I realized that although we were all parents with children attending different levels of the primary school education system, and all formally educated, the decisions about

1 Standard one is the first year of primary school in Kenya, graded standard one to eight before children sit for the Kenya Certificate of Primary Education (K.C.P.E) which is the examination that marks the end of the primary years.
our children’s educational experiences, especially those in early childhood education, was the onus of their teachers. From these casual encounters, there seemed to emerge discordant voices, some of which resonated with my own, reflecting intense emotions and conflicting value assessments. In particular, the divergent attitude and expectations about the preschool’s educational role was apparent. Therefore, it appears that for the parents who objected to play in learning, the earlier the start to academic success and subsequent entry to an excelling primary school the better.

Although entry to standard one in Kenya is presently a requirement for all children, according to the Free Primary Education (henceforth FPE) policy, since 2003, selection to sought after schools, especially those that perform better in the K.C.P.E examinations, is done through an entry interview (Mwaura, Sylva & Malmberg, 2008:238). Even some public schools that traditionally ought to have been open to all children use entry interviews to limit the number of children that the school’s facilities can accommodate.

Faced with such opposing demands for the preschool’s role, can we access preschool teachers’ beliefs about children’s Developmentally Appropriate Practices (DAP), given such divergent demands? In addition, are teachers facing any conflict, even as they try provide learning within the DAP framework? If so, how does the teacher resolve this conflict in planning for children’s learning experiences? If there is conflict between parents and children’s

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2 The definition and further elaboration of the DAP principles follow in voyage one.
(DAP) priorities, how do the teachers resolve such conflicts, especially in contexts where parents employ teachers? What educational opportunities do preschool teachers provide children to engage in activity-based learning? What do they actually teach the children? How do the teacher’s practical experiences with the children frame such beliefs? Do they provide children with opportunities to play and learn as they develop holistically? In addition, could preschool teachers be facing pressure to remain developmentally appropriate in the providing for children’s learning? What beliefs and rationale motivate their content selection for preschool children?

Despite all these questions that I think require answers for a deeper understanding of the dynamics of preschool education in Kenya, little research has focused on teachers’ beliefs about DAP. Besides, there seems to be limited research into the nature of preschool children’s educational experiences in contexts where the preschool’s definition might be synonymous with preparation for school (Prochner & Kabiru, 2008:128), in the face of such conflicting demands. Therefore, my earlier introspective experience raised questions that I continue to ponder, most of which remain unanswered to date, and the possibility of taking up a researcher’s role to examine some of the dynamics that shape teachers’ beliefs and their decisions for children’s educational experiences. This was the beginning of my inquiry.
SETTING THE STAGE FOR THE JOURNEY

1. DAP as a template recommended for early child development and learning

The DAP framework that is consolidated into twelve principles guides this study. The National Association for the Education for Young Children, NAEYC (2009:10) policy position affirms that the origin of DAP “Developmentally appropriate practice as defined…is not based on what we think might be true or what we want to believe about young children. Developmentally appropriate practice is informed by what we know from theory and literature about how children develop and learn’

Framed from an international perspective of the concept of DAP that might have shaped ECE guidelines in Kenya (Swadener, Wachira, Kabiru & Njenga 2008:414), I situate my inquiry within the ECE educational experiences of four preschool teachers and children in a peri-urban University context in Kenya. In the study, I seek to embrace five theoretical constructs related to DAP that I juxtaposed with the observed children’s educational experiences to give it structure, form and meaning; teaching strategy, use of learning materials, scheduling of children’s educational experiences, assessment and consideration for children’s individuality.

2. DAEP as a specific framework for this study.

In addition to adopting the ‘universal’ DAP template as espoused in early childhood development literature as the study’s conceptual framework, I also use the term ‘developmentally appropriate educational practices’ (DAEP) specifically in my study to stress the educational components; content and process inherent in the DAP framework. Therefore, while DAP stresses child development and learning consolidated into 12 principles, DAEP specifically refers to my study’s discussion of the five constructs that I consider in this study: teaching strategy, use if materials, scheduling, assessment and consideration of children’s assessment, all of which are related to DAP. As I begin my academic journey, I present a general background to the study.
PREPARING YOU TO NAVIGATE THE JOURNEY

1. You will meet voyages instead of chapters

Dispensing with the conventional academic nomenclature, I have elected to refer to ‘chapters’ in this thesis as ‘voyages’. In this research, I visualised the entire doctoral experience as a metaphorical journey for four reasons: firstly, any journey has an entry point with a purpose; secondly, there are various detours along the way posed by challenges encountered at various phases in the journey. Thirdly, there are memories of adventure along the journey because of new experiences and new knowledge, and fourthly and last, the possibility that both the academic and non-academic experiences of the doctoral journey lead to new growth as the journey ends. For all these reasons, I fit my doctoral journey into the metaphor of a journey, with several voyages encountered. I have planned eight voyages for this journey, each briefly summarised at the end of the first voyage.

2. The organisation of the thesis and structure of each voyage

You will see pictures at the beginning of each voyage and a brief sojourn at the end of each voyage in this journey. The inserts at the beginning of each voyage are pictures encased in a page border with introductory remarks to herald entry and each provides an overview of what to expect in the voyage. Another insert at the end of the voyage heralds a sojourn that summarises a voyage’s experiences.
## Acronyms Commonly Used in This Thesis

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<td>CRC</td>
<td>Convention on the Rights of the Child</td>
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<td>DAEP</td>
<td>Developmentally appropriate educational practices</td>
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<tr>
<td>DAP</td>
<td>Developmentally appropriate practices</td>
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<tr>
<td>DICECE</td>
<td>District Centres of Early Childhood Education (Kenya)</td>
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<td>ECE</td>
<td>Early Childhood Education</td>
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<tr>
<td>ECD</td>
<td>Early Child Development</td>
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<tr>
<td>ECDE</td>
<td>Early childhood development and Education</td>
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<tr>
<td>EFA</td>
<td>Education for all</td>
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<td>FPE</td>
<td>Free primary education</td>
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<td>GOK</td>
<td>Government of Kenya</td>
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<td>KHA</td>
<td>Kenya Headmistress’ Association</td>
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<td>K.I.E</td>
<td>Kenya Institute of Education</td>
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<tr>
<td>MOE</td>
<td>Ministry of Education (Kenya)</td>
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<td>NACECE</td>
<td>National Centre for Early Childhood Education (Kenya)</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children Education Fund</td>
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<td>UN</td>
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<td>USA</td>
<td>United States of America</td>
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VOYAGE ONE
A PROPOSAL FOR MY ACADEMIC EXPLORATION STARTS...

R: Hi, it is daybreak… the sun has just woken up…
with it has come for me an opportunity,
To find answers to queries long held, deeply
in the whispers of my mind,
That my heart has always felt and touched,
So disturbingly popping out, but no further than the mind’s doorstep...
I propose an academic journey that I want to take….
To a land so far away… planning several voyages...
That, through this journey, these queries may find a way,
to the world of the known,
Unlocking answers, not only to the doorstep
but also to the world at large...
As the journey begins, I will let you know...

2. What made me plan for this journey? (The gaps in research)
3. Is the journey worthwhile? (Justification/need for the study)
4. What do I hope to accomplish when this journey is over? (Objectives of the study)
5. And lastly, some direction markers (Definitions)

Join me now,
So that I can show you that this journey will bring you a different experience,
Through a path, never travelled before, meeting people you have never met,
In contexts that might be so different from your own.
Is it justifiable… come along with me…?
1.1 INTRODUCTION

In this section, I provide the rationale for the study, in addition to a background that focuses on the meanings of child-versus teacher-centred approaches to learning. In addition, I focus the study with a brief account on the demand for preschool education before stating the research question and the critical questions guiding the study. Additionally, a brief overview of the methodology and data analysis provides a glimpse of the design used to address the research questions and the subsequent data analysis. I also justify the need for the study, in addition to the context of preschool provision in Kenya to overlay the analysis and interpretation of the study findings. Besides, there is a brief overview of the DAP framework and the bioecological systems theory as the conceptual framework and the theoretical framework respectively, that guide the study. This section concludes with the conceptualised terminology, assumptions of the study and an outline of the entire voyage.

1.2 THE RATIONALE OF THE STUDY

Children need people in order to become human… [If society neglects children] …we face the prospect of a society which resents its own children and fears its youth (Bronfenbrenner, 1972:663).

Appropriate educational experiences for children in early childhood lay the foundation for their lifelong learning dispositions, besides influencing how they later function in school and beyond (Katz, 1995; National Association for the Education of Young Children, NAEYC, 1997; 2009; Rushton & Larkin, 2001:25; 30, Stipek, 2007; Stipek, Feiler, Daniels & Milburn; 1995). However, despite the teacher being the “essential ingredient in determining the quality of education received by the child” (Kostelnik, Soderman & Whiren, 2004:35), teaching at the preschool\(^1\) has continued to become “unforgivingly complex” (Cochran-Smith in Goldstein, 2007a:51).

Teachers face conflicting demands to meet children’s developmental needs, through developmentally appropriate practices\(^2\) (henceforth DAP), while parents and other

---

\(^1\) In this study, a preschool refers to the early learning context admitting children between 3-year-old and five-year-old. I use the term interchangeably with early childhood education and development.

\(^2\) DAP principles embrace three pillars in children’s education process; the nature of children’s development and learning, the strengths, needs and interests of individual children and the social and cultural context of learners (Kostelnik, Soderman & Whiren, 2004:15). As noted, I also use the term ‘developmentally appropriate educational
stakeholders demand that teachers teach children academic skills or standards’ requirements3 (Goldstein, 2007b:382; 396; Maccoby & Lewis, 2003:1074; Miller, 2005:257; Miller & Smith, 2004:123; Morrison, 2006:223, 251; Neuman, 2005:191; Palmer, 2005:26; Warner & Sower, 2005:242; Parker & Neuharth-Pritchett, 2006). Teaching academic skills for school readiness (Seefeldt & Wasik, 2006:35; Neuman & Roskos, 2005:24), also called accountability “shovedown” (Barblett, 2003:27; Hatch, in Goldstein, 2007b:380; Stipek, 2007:741) might complicate teachers’ decisions to embrace DAP in their teaching (Geist & Baum, 2005:30; Parker & Neuharth-Pritchett, 2006; Wien in Goldstein, 2007b:380). This is because knowledge of kindergarten teaching and ‘standards’ do not fit together seamlessly (Goldstein, 2007b:382; 396). Consequently, the impact of these conflicting demands on preschool teachers’ beliefs about children’s developmentally appropriate educational experiences has introduced complex demands that require further scrutiny.

A DAP framework to childhood education embraces cultural diversity. However, cultures vary in the way they perceive and define childhood. Consequently, these variations inherent in cultural diversity and expectations for early childhood might call for culturally situated research conclusions (Bredekamp & Copple, 1997; Hatch, 2007:1; Kilderry, Nolan & Noble, 2004:26; Klein & Chen, 2001:5; 31; Koops, 2004:13; Robinson & Diaz, 2006; Nutbrown, 2006:25; Pence & Marfo, 2008; Penn, 2000:9; Penn, in Robinson & Diaz, 2006:59; Prochner & Kabiru, 2008; Warner & Sower, 2005:24). Therefore, research (teacher’s beliefs) ought to be culturally sensitive to contexts in which children grow and develop, to reflect childcare practices entrenched in social, cultural and historical values of a particular community (Prochner & Kabiru, 2008; Pence & Marfo, 2008; Robinson & Diaz, 2006; Wishard, Shivers, Howes & Ritchie, 2003:96).

Stipek and Byler (1997:319) caution that researchers should embrace community values in their studies, while Jambunathan and Caulfield (2006:252) with Jingo and Elicker (2005:131) conclude that literature on teacher practices in early childhood classrooms in developing countries or various cultures is limited. Complementary studies are necessary practices’ (DAEP) specifically in my study to stress the educational components; content and process inherent in the DAP framework.

3 In the study, ‘standards’ or ‘academic skills’ or accountability will be used to refer to a focus to meet prescribed external requirements or to teaching subject content areas in preparation for transition to the primary school(such as the interview requirements in Kenya).
to develop an inclusive theoretical understanding of early childhood practices that include literature from the minority world, since much of the current literature in early childhood derives from research done in the west⁴ (Pence & Marfo, 2008:81; Smidt, 2007:63).

Therefore, in partly providing context-specific DAP, the current study embraces the bioecological systems theory to explore and describe children’s educational experiences and the factors that influence teachers’ beliefs and use of DAP, to provide a link between contextual factors and the belief-practice relationship. Through the bioecological systems theory, the study analyses some factors influencing the DAP belief-practice relationship within the social cultural context, in order to contribute further to the DAP belief-practice dialogue. This might provide insight into how teachers decide children’s learning experiences in these unexplored contexts, since teachers decide what to implement in their classrooms regardless of what other stakeholders might consider as appropriate practices (Lee, 2006:433). The current study further interrogates this belief-practice dynamics within the bioecological systems in the Kenyan context, to illuminate and complement other studies about teachers’ beliefs of developmentally appropriate educational practices in their work experiences.

Goldstein (2008:257) concludes that:

…there is no single correct response to the question of what curriculum content or which instructional practices are developmentally appropriate for an individual child, a certain classroom full of students, a particular school setting, or a specific socio-cultural context; every question has many possible answers.

As Goldstein (2008) acknowledges, there could be many divergent voices on DAP, which not only call for diverse social and cultural responses, but which might also complicate teacher decisions about children’s educational experiences. Hence, the current study seeks some possible answers among the many, about teachers’ beliefs of developmentally appropriate practices.

In addition, the study explores teachers’ beliefs about observed⁵ preschool children’s educational experiences in a Montessori and an eclectic preschool system (henceforth

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⁴ Studies done in western oriented countries of the world
⁵ This study was carried out in two sites: a Montessori preschool and a preschool (DICECE) which embraces a locally designed early childhood curriculum.
DICECE) respectively, in a developing country namely Kenya. This is because there seems to be lack of consensus about what children should be taught, or how standards should be implemented (Wien, in Goldstein, 2007b:380; Stipek, 2004:550). Although the study does not explicitly compare both Montessori-trained and eclectically trained teachers in their beliefs and practices, it provides data that makes this comparison possible.

At the methodological level, most studies have tended to use self-reported beliefs (Kowalski, Pretti-Frontczak & Johnson, 2001; McMullen & Alat, 2002; McMullen, Elicker, Wang, Erdiller, Lee, Lin & Sun, 2005; McMullen, Elicker, Goetze, Huang, Lee, Mathers, Wen & Yang, 2006), which might be limited in capturing the teachers actual beliefs, because teachers tend to express “conventional wisdom” (Hyson, in McMullen, 1999). There are links between teachers’ beliefs and their practices demonstrated in previous research (Kim, Kim & Maslak, 2005:443; Maxwell et al., 2001:443; McMullen et al., 2005:461; Phillips, 2004; Stipek & Byler, 1997:318; Vartuli, 1999:507; Wang, Elicker, McMullen & Mao, 2008:243). However, some of these studies were largely quantitative (e.g. Cassidy & Lawrence, 2000; Kim et al., 2005; Stipek & Byler, 1997), while some established a lack of correspondence between beliefs and practices (e.g. Cassidy & Lawrence, 2000; Foote, Smith & Ellis, 2004; Zeng & Zeng, 2005; Winsler & Carlton, 2003).

Beliefs are entrenched in a person’s repertoire of experience. Therefore, although quantitative studies are generalizable, self-reports might be limited in capturing beliefs (Kuhn, in Lee, 2006:434; Stipek, 2004:561). Besides, studies that use classroom observation other than teachers’ self-reports about their practices might be few (Stipek, 2004:561; Vartuli, 1999:507; Zeng & Zeng, 2005:718), highlighting a limitation because “teachers tell you what you want to hear” (Vartuli, 1999:508). To counter the limitations of self-reported beliefs, this study used video and photo-elicitation to capture the teachers’ beliefs inherent in their practices. This approach provided the teachers with an opportunity to express themselves, as they also chose the photographs or video to view and discuss. Therefore, beliefs elicited through observations that concretize teachers and children’s educational experiences are necessary in contextualising the belief-practice relationship.

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6 A detailed literature review follows in the next voyage.
It also appears that because teachers’ beliefs might determine children’s educational experiences, there is a need to interrogate aspects of the belief-practice domain so as to contribute literature that includes various constructs related to the DAP template. Most studies have tended to group beliefs as generally appropriate or inappropriate (Snider & Fu, in Lee & Ginsburg, 2007:4), or have used broad theories such as maturationist, behaviourist or interactionist (Caruso et al., in Lee & Ginsburg, 2007:4), or child-oriented versus skills oriented (Stipek & Byler, 1997). Previous studies also locate beliefs as either child-centred or teacher-directed, in relation to teacher beliefs or DAP (Cassidy & Lawrence, 2000; McMullen et al., 2006; 2005; Vartuli, 1999; Stipek, 2004; Jambunathan & Caulfield, 2006; Zeng & Zeng, 2005). This study will rather seek appropriate beliefs according to the DAP principles, even within teacher-directed approaches, including experiences that might appear to be developmentally inappropriate practices (henceforth DIP).

In this study, the constructs pursued include beliefs that relate to the teachers’ teaching strategy, their use of materials, scheduling, assessment and interpretation of children’s individuality. By including these five constructs at the same time as a framework for analysis, the study not only provides a deeper understanding of them, but also provides an holistic perspective of how these DAP constructs relate to each other and to teachers’ beliefs in a single study. This way one can access both ‘children’s and teachers’ real experiences during the teaching and learning process (Jingbo & Elicker, 2005:131) as it includes both content [what] and process [how] of teaching and learning. In addition, the study explores factors that influence teachers’ use of developmentally appropriate practices (Parker & Neuharth-Pritchett, 2006).

In summary, methodological (video and photo-elicitation), and conceptual (five constructs related to DAP: teaching strategy, use of learning materials, scheduling, assessment and children’s individuality), are brought together in a single study. It also considers DAP within a continuum, rather than either/or, and context specific [Montessori and DICECE] cultural rationales are significant so that this study might contribute to early childhood education literature. In the following section I provide a preview of child-centred versus teacher-directed learning and how each relates to the principles of DAP.
1.3 A GENERAL BACKGROUND TO THE STUDY

The terms attached to early childhood go beyond mere labels: they imply different purposes, pedagogical practices and forms of delivery, not to mention the varying social and economic status of the personnel involve (UNESCO, 2002:1).

1.3.1 CHILD-CENTRED VERSUS TEACHER-DIRECTED LEARNING

There continues to be a debate as to whether teacher-directed or child-centred might be appropriate for effective learning and holistic development in kindergarteners (Stipek et al., 1995:209). Although early educators might use both approaches, there seems to be a strong recommendation for child-centred approaches to child development that might be holistic. Child-centred approaches developed from theoretical and empirical research on constructivist learning, while teacher-directed approaches align with behaviourist approaches. A blend of both approaches might involve understanding the nature of the child from within many theoretical paradigms, such as constructivist, behaviourist, maturational and social-cultural, to synthesize “genetic potential, past development, and current environmental circumstance” to explain development (Sroufe, Cooper & DeHart, 1996:8).

Sugrue (1997:6) consolidates definitions used for child-centred approaches, also known as ‘progressive’ teaching, to offer a wide-ranging terminology. These includes ‘developmental’, ‘craftsman teaching’, ‘informal teaching’ and ‘process teaching’, to distinguish child-centred approaches. DAP or child-centred approaches recognize the need for children to engage actively with their learning environment so that they develop cognitive, social, emotional and physical functioning (Burke & Burke, 2005:282; Cassidy, 2005:144; Geist & Baum, 2005:28; Goldstein, 2007b:378; Klein & Chen, 2001:31; Kostelnik et al., 2004:18; Neuman & Roskos, 2005:25; Rushton & Larkin, 2001:26-8; Stipek, 2007). Therefore, as a guide for appropriate practices that develop the whole child, DAP embraces many principles of a child-centred approach to learning (Stipek, 1993:30).

DAP is an ideal, historically and philosophically entrenched approach to Kindergarten learning, derived from years of research into the unique nature of each child’s way of learning (Bredekamp & Copple, 1997; Goldstein, 2007b:380; Gordon & Browne,
Voyage 1: A proposal for an academic journey starts

2000:207; Kostelnik et al., 2004:51; NAEYC, 1997; 2009), rooted in the relationship between neurological research and learning (Rushton & Larkin, 2001:32). In addition, cultural diversity invariably influences children’s approach to learning tasks (Jalongo et al., 2004:144; Klein & Chen, 2001:17). Paciorek and Munroe, in Kostelnik et al. (2004:14) relate good practices to DAP, noting that:

Good practice is teachers in action: teachers busy, holding conversations, guiding activities, questioning children, challenging children’s thinking, observing, drawing conclusions, and planning and monitoring activities throughout the day.

A DAP principles approach considers age appropriateness, individual appropriateness, and cultural appropriateness in the way children learn (Bredekamp & Copple, 1997; Charlesworth, Hart, Burts & DeWolf, 1993:12-3; Charlesworth, 1998; Ludlow & Berkeley in Jalongo et al., 2004:144; Kostelnik et al., 2004:16-7; Philips, in Klein & Chen, 2001:31; NAEYC, 1997; 2009).

In contrast, teacher-directed approaches, also sometimes called DIP, are usually associated with ‘traditional teaching’ (Parker & Neuharth-Pritchett, 2006). These are also referred to as ‘didactism’, ‘transmission’, ‘telling’, ‘teacher-centred’, ‘rigid’, ‘uniform’, ‘narrow’ and ‘content-driven’ (Bullough, Samuelowicz & Bain, in Sugrue, 1997:5). Skills teaching appear to support the acquisition of certain abilities, such as letter recognition and reading achievement, besides giving a possible head start to children from low-income backgrounds (Adams & Engelmann; Engelmann both in Stipek, 2004:551; Stipek et al., 1995; Stipek, in Neuharth-Pritchett, 2006).

Kindergarten teachers can plan for teacher-directed, child-centred or a nested approach that blends both approaches (Stipek, 1993). Through the latter approach, children engage meaningfully in their learning, as the teacher also deliberately teaches basic academics or standards skills necessary for school readiness (Goldstein, 2007b:378-379; Seefeldt & Wasik, 2006:32-5). Blending both academic skills teaching and child-centred learning/DAP might not be easy, owing to several factors that influence the use of DAP. These include teachers’ personality factors, such as their self-efficacy, locus of control, trait anxiety (McMullen, 1999), educational and professional experience (McMullen & Alat, 2002; McMullen, 1999), and external pressure for academic skills (Dunn & Kontos, in Rushton & Larkin, 2001:25; Geist & Baum, 2005:29; Goldstein, 2007b:379; Seefeldt & Wasik, 2006:43). Besides, the interpretation of DAP as either present or
absent, rather than existing in a continuum (Charlesworth et al., 1993; Kontos & Dunn, 1993: Kostelnik et al., 2004:33-9; Parker & Neuharth, 2006), might have introduced the rival dichotomous approaches to early childhood education, placing teachers on the ‘horns of a dilemma’ (Katz quoted by Wien, in Goldstein, 2007a:41). Stipek et al., (1995:220) suggest “appropriate early childhood education be framed in less black-and-white terms than is often framed in the literature”. Such framing might allow blending of academic skills with children’s play.

In conclusion, whether teachers use child-centred approaches or teacher-directed appear to influence children’s development and acquisition of academic skills. While child-centred approaches support children’s holistic development that include physical, social, emotional, and higher order cognitive development, teacher-directed approaches that do not allow children to engage in the process of learning, might compromise some domains of child development. Regardless, teacher-directed approaches are valuable for children to develop reading competence. Therefore, a balance of both child-centred and teacher-directed practices might facilitate children’s holistic development as well as equipping them with academic skills for later school success. Such practices would be located on a continuum of DAP from highly DAP, to less DAP. The following section is a discussion of the demand for academic skills competence as a requirement that might require teacher-directed approaches. Figure 1 illustrates the meeting point between teacher-directed and child-centred approaches to result in DAEP.

**Figure 1:  Relating DAP to teaching approach**
1.3.2 DEMAND FOR ACADEMIC SKILLS COMPETENCE

Many nations now demand accountability in early childhood, especially as an equity strategy that brings all children with diverse social backgrounds on a par with each other (Republic of Kenya, 2006b; Republic of Kenya, 2005; NAEYC, 1997; 2009). This demand appears to be motivated by a ‘head start’ philosophy or the ‘early advantage theory’ (Mwaura et al., 2008:238; Robinson & Diaz, 2008:51). Although the movement head start originated in the USA, with NCLB policy7 (NAEYC, 2009:3), many states of the world appear to have embraced this push for an early start to academic excellence. Miller (2005) cites the example of England, Cassidy (2005) cites the Scottish example, Jambunathan and Caulfield (2006) that of India. Biersteker et al. cite the example of Kenya, Wang et al. (2008) give examples from China, Yoo (2005) gives examples from Korea, and Barblett (2003) cites the Australian case.

As already noted, the demand for academic skill competence for children has implication for the teaching approach that teachers use. The concern for accountability measures invariably affects how and what teachers plan as children’s educational experiences (DiBello & Neuharth-Pritchett, 2008). As mentioned above, the push for academic skills that might require teacher-directed approaches, appears to contradict the principles of DAP (Goldstein, 2007a:41; Maccoby & Lewis, 2003:1074; McMullen, 1999; Miller, 2005:257; Miller & Smith, 2004:123; Miller, 2005:258; Morrison, 2006:223, 251; Neumann, 2005:191; Palmer, 2005:26; Parker & Neuharth-Pritchett, 2006; Stipek et al., 1995:209; Warner & Sower, 2005:242). DAP incorporates many dimensions of the child-centered approach (Henson, 2003:6; Stipek, 1993:32; Sugrue, 1997:6-8).

As a result, children in teacher-directed classes in contrast with those in child-centred preschools have limited opportunities to construct their own learning (Bredekamp & Copple, 1997; Kostelnik, 2004; Montessori, 1920; Stipek, 2007; 1993:30; Vygotsky, 1978). In addition, they might not develop higher order thinking (Stipek, 1993; Stipek et al., 1995; Stipek, 2007), have less motivation to learn (Katz, in Stipek, 1993), or may develop dependency on adult authority (Elkind, in Stipek, 1993). They might also experience social and emotional problems because they get limited opportunities to interact with peers as requisite to their social and emotional skills development.

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7 Head start is a project in the USA, meant to uplift the educational achievement of children from low income communities to compete favourably through school.
Voyage 1: A proposal for an academic journey starts (Charlesworth et al., 1993; Stipek et al., 1995). In view of Montessori’s (1920:14-5) caution, teacher-directed approaches that inhibit the child’s freedom of movement are analogous to ‘butterflies pinned to the desk’, rendering their wings useless. Burke and Burke (2005:282) conclude that an academic focus on children “short-changes other aspects of development”.

Acknowledging the complexity of teacher-decisions in the face of many factors, Kostelnik et al. (2004:34) note “the reality is that teaching is complex; no single solution fits every circumstance”. Given this complexity, Goldstein (2007a:42) concludes that “there are many teachers struggling to find ways to manage the DAP versus the standards dilemma in their daily practices”. Klein and Chen (2001:31) warn that “DAP is extremely complicated” because of the variable nature of children in the programme, and they caution that parents’ expectations might also vary, even within the same programme. Consequently, preschool teachers⁸ might find it difficult to get a workable solution to balance between the conflicting demands (Adams & Swadener, 2000:400; Goldstein, 2007b:380; Geist & Baum, 2005:29), because the ideal conditions to strike a balance in a continuum might be complicated. For example, an academic skills approach might require whole group, predetermined activities, while a DAP approach might involve individualised activities in which children learn at their own pace. Grisham-Brown et al. (2005:21) note that there is lack of consensus on how developmentally appropriate practices should be implemented, which seems to accommodate the complexity. Nutbrown pushes the debate further into variable social contexts thus:

Herein lies the questions for research. How can educators know what should be learnt? How are the decisions about what to teach next taken...? Of course views on development and what constitutes appropriate development is always contestable (2006:25).

In line with cultural diversity, more recently the recommendation for early childhood teachers to embrace a culturally sensitive approach to the use of DAP has come to the fore (Bredekamp & Copple, 1997; NAEYC, 1997; NAEYC, 2009). Bredekamp (in Goldstein, 2008:255) identify cultural context dynamics such as parents’ preferences, community values, societal expectations, and educational requirements of the succeeding levels as some of the factors that a culturally-sensitive DAP ought to embrace. It appears

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⁸ In this study I use preschool teacher to reflect the name commonly used in the context of the study to refer to early childhood teachers (read Kindergarten teachers/early childhood educators) of children between ages three and five years.
from the recommendation that the value system of a community ought to guide early childhood educators (Bredekamp & Copple, 1997; Kostelnik et al., 2004). Goldstein (2008) complicates the DAP cultural matrix by introducing a “politically appropriate” dimension to early childhood practices. This appears to introduce complex factors that entwine to affect teachers’ use of DAP (Adams & Swadener, 2000:400; Geist & Baum, 2005:29; Goldstein, 2007b:380; 2008; Klein & Chen, 2001:31; Kostelnik et al., 2004:34; Parker & Neuharth-Pritchett, 2006).

Given the matrix of DAP to embrace multiple levels of ‘appropriateness’ at three levels; child characteristics and the nature of the learning environment, cultural sensitivity, as well as political appropriateness, DAP becomes even more intricate. The DAP matrix increases in complexity where the cultural composition is as diverse as 43 tribal groupings in Kenya, who might not share similar values. This is because the responsibilities for and of children and childhood, besides the general policies guiding the provision of ECE, plus cultural expectations, tend to vary from one context to another (Klein & Chen, 2001:31; Koops, 2004:13; Nutbrown, 2006:25; Penn, 2000:9; Penn, in Robinson & Diaz, 2006:59; Warner & Sower, 2005:24). Concerning the changing landscape of expectations of early childhood, and its relationship with DAP, Hatch concludes:

the experience of being a child in the post-modern era is very different...accountability concerns have been pushed down into the early years schooling forcing everyone to reconsider what accounts as appropriate early childhood education (2007:1).

Significant to teachers’ decisions about children’s educational experiences, are their beliefs (Kowalski, Brown & Pretti-Frontczak, 2005:24; Lee & Ginsburg, 2007:4; Maxwell, McWilliams, Hemmeter, Ault & Schuster, 2001:434; Wang et al., 2008:228; Wilcox-Herzog & Ward, 2004). However, beliefs override knowledge, while acting as screens for sieving personal experience and action (Lortie, 2002). Consequently, beliefs are likely to influence teachers’ objectives (Lee, 2006:433; McMullen & Alat, 2002) for the teaching-learning partnerships (Brownlee & Berthelsen, 2006:24).

Because of the value of beliefs in predicting decisions, it appears reasonable to explore further the belief-practice domain to understand the social and cultural dynamics inherent in preschool children’s educational experiences. Beliefs are socially constructed and mainly rooted in culture, (Hayden & Penn both cited in McMullen et al., 2005:452), and in personal experiences of teachers (Brownlee & Berthelsen, 2006:19; Schoonmaker & Ryan; Katz both in Cassidy & Lawrence, 2000:193). Therefore, variations in beliefs inherent in cultural differences and personal experiences might be expected (Wang et al., 2008:228). Samuelsson (2006:115) captures contextual variations in defining childhood and children as “the way a society thinks about its children affects its opinions about their capabilities and skills”. Robinson and Diaz (2006:6) eloquently frame this new dispensation: “there has been an increased awareness of the need to view child development within different social, cultural, political contexts of childhood”. Penn argues further that:

…Since each country and sub-group within it may represent a rather radically different viewpoint or set of expectations towards what children are…do or should not do…such world views accounts of childhood and culture cannot be simply compared (2000:9).

From the preceding discussion, I make the following conclusions; first, teachers are increasing facing demands that contradict DAP (read best practices, principles of child development), the basis upon which they are trained. Second, the definition of childhood and the expectations for children is not only culturally diverse, but also intra-culturally varied. Third, personal experiences reinforce beliefs and behaviour. Contradictory demands, a culturally situated childhood and beliefs are all significant in understanding how preschool teachers’ beliefs frame their understanding and interpretation of DAP. In the following section, I state and elaborate on the purpose of my study.
1.4 THE PURPOSE OF THE RESEARCH

The purpose of my research is to explore the way preschool teachers’ practical experiences frame their beliefs and interpretation of developmentally appropriate educational practices in the face of conflicting demands that require them to remain DAP, while facing what I call highly ‘academised’ expectations of preschools in Kenya. This might enhance an understanding of the continuum of DAP beliefs and practices involved in children’s educational experiences within five constructs related to DAP; teaching strategy, use of materials, scheduling, assessment and providing for children’s individual differences. In addition, the study provides insight into the current role that the preschool environment plays in the child’s educational experiences in Kenya.

1.4.1 THE MAIN RESEARCH QUESTION

Against this background, the main research question is posed as: How do preschool teachers’ practical experiences frame their beliefs, understanding, and interpretation of developmentally appropriate educational practices?

1.4.2 CRITICAL QUESTIONS GUIDING THE STUDY

The following critical questions are also posed:

1. How do preschool teachers interpret developmentally appropriate educational practices?
2. How does preschool teachers’ interpretation of DAEP express itself in their interaction with children?
3. What are the beliefs underlying teachers perception and interpretation of DAEP?
4. What are some of the factors influencing such beliefs?

1.5 METHODOLOGY AND DATA ANALYSIS OVERVIEW

The constructivist paradigm in which it is believed the actors in the social world socially construct experiences guides this study. Therefore, teachers as participants, and I as the researcher, were capable of using our individual and collective experiences to create an understanding about children’s educational experiences and the teachers’ beliefs about
DAP, viewed through our social and cultural lenses, to explain such experiences. Visually recorded observations and interviews\(^9\) were the tools of data generation.

The participants in the study were four female teachers, three certified under the Montessori system and one trained as a DICECE teacher. I explored, using video and photographs, four- and five-year-old children’s educational experiences in two separate settings, using a case study design. I then used the video and photographs as visual elicitation tools to explore teachers’ emerging beliefs.

The data was first analysed\(^\text{10}\) deductively, through a bottom-up approach that generated themes on children’s educational experiences and teachers’ beliefs. The themes derived from children’s educational experiences became the basis of subsequent analysis of teachers’ beliefs according to the five thematic constructs related to DAP: teaching strategy, use of teaching materials, scheduling, assessment and consideration for children’s individuality. These constructs also provide structure to the data presented.

### 1.6 SIGNIFICANCE OF THE STUDY

The study contributes to the increasing need for research that locates DAP in a social and political context where children grow and develop. The adoption of the Bioecological systems theory to understand the dynamics of teachers’ beliefs of developmentally appropriate educational practices in Kenya contributes to such a need. This study provides:

- insight into the factors that influence teachers’ beliefs and their use of developmentally appropriate practices. This knowledge is necessary to inform early education policy and to improve preschool provision in Kenya.
- as part of a relatively new approach to access teachers’ beliefs, some insights into and challenges on a methodological level with regards to the use of visual elicitation.
- insight into the nature of children’s educational content and processes, and in turn areas on which teachers focus the children’s educational experiences.

In the following section, I preview preschool education provision in Kenya.

\(^9\) See voyage three for a detailed discussion of the paradigm and methodology used in the study.

\(^\text{10}\) For a detailed approach to data analysis, refer to voyage four.
1.7 EARLY CHILDHOOD EDUCATION IN KENYA

A brief background of ECE in Kenya provides insight to the social and cultural dynamics in the study. In comparison to other sub-Saharan countries, Kenya has a well-established system of early education and care (Adams & Swadener, 2000:387), with a remarkable increase in provision over the years since independence (Biersteker et al., 2008:232). In Kenya, early childhood development and education, henceforth ECDE, is a broad term used to encompass the various early childhood care services, such as play group (six-months to two-years), baby class (three-year-olds), pre-primary-one (four-year-olds) and pre-primary-two (five-year-olds) (Republic of Kenya, 2005:2). An earlier policy guideline by the Nation Centre for Early childhood Education (NACECE), a body which also co-ordinates ECE provision services, defined early childhood development centres as contexts where a 0-6 year children’s total needs; such as care, love, education socialization, health and nutrition, are met (NACECE, 1999:20).

The standard guidelines for preschool education in Kenya recommend child-centred methods for children to enjoy their learning (Republic of Kenya, 2006a:2). However, one contentious issue facing some preschool children in Kenya today, especially in urban centres, is an increasing focus on academic skills (Adams & Swadener, 2000:394; Mbugua, 2004:196; Mwaura et al., 2008:238; Prochner & Kabiru, 2008:126). Part of the focus on academic skills includes holiday tuition, even for preschool children (Waithaka, 2006). Although there seems to be no research to indicate the extent of bias for teachers to focus on academic skills, a study by Ng’asike (2004) might suggest that the problem exists and could be spreading. Therefore, the current study is in part an effort to explore children’s educational experiences.

In Kenya, the guidelines for ECE set out the following objectives as stipulated in the early childhood development guidelines. These guidelines closely relate to principles guiding DAP, which include emphasis on individualized learning and home-school partnerships (Republic of Kenya, 2006a:1-2). According to the document developed by NACECE (1999:V), the general objectives of ECD programme include principles that emphasize an holistic approach to child development. These include children’s ability to learn through play, to develop confidence to approach learning tasks and to enhance their

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11 There is more context information in the second voyage.
creativity. In addition, it encourages practices that promote children’s self-awareness and cultural appreciation, as they build good habits and values as members of a group. Additionally, practices that help children develop moral values and to improve their health and nutritional status are encouraged. Lastly, the document outlines skills to develop in children as part of equipping them to cope with primary school life.

1.8 THE CONCEPTUAL FRAMEWORK OF THE STUDY

The document on guidelines for preschool education in Kenya does not explicitly mention DAP. However, a synthesis of the guidelines to preschool education underscore four dimensions (physical, cognitive, emotional and social) developed through exploration and active manipulation of the environment through play that relate to the holistic DAP template. This study will adopt the DAP principles and the bioecological systems theory to provide a lens through which the data is generated, analysed and interpreted. The DAP principles framework is chosen for four reasons: Firstly, the development of the DAP principles has been informed by theory of, and research into childhood development and learning. This is a synthesized document, which relates early childhood development and research to children’s learning and development through best practices. Therefore, since Montessori and other training colleges might base their teacher training on the theories of child development and learning, these DAP principles, although originating from the USA, provide a platform to examine the way teachers’ beliefs and practices in Kenya relate to the principles of child development. Secondly, an examination of the DAP principles and the Kenyan standards’ guideline for early childhood development have a close correspondence.

Thirdly, the Kenyan government had developed its early childhood curriculum in conjunction with international partners, such as the World Bank, the Bernard-Van-Leer Foundation, and the Aga Khan Foundation. The curriculum was preceded by workshops organised in conjunction with USA early childhood experts (Adams & Swadener, 2000; Swadener & Mutua, 2008). These collaborations might have influenced the content of the early childhood curriculum development.

Fourthly, the DAP principles have had a significant impact on the early childhood practices internationally, having crossed its original American borders through conferences, workshops and various publications (McMullen et al., 2005:453). Pence
and Marfo (2008:80), as well as Prochner and Kabiru (2008:126), quoting other scholars as Gakuru, Hyde and Kabiru, and Myers, conclude that western models guided most preschool curricula in African countries.

Therefore, as mentioned above, apart from the close correspondence between the standard guidelines for preschool education in Kenya and principles of DAP guiding the study, Pence and Marfo (2008:80) together with Smidt (2007:63) conclude that ideas and research from the West continue to influence preschool education in many parts of Africa and other parts of the world. Swadener et al., (2008:414) agree that the preschool standards template in Kenya has a mix of both local and a global template, comprising “Western, assumptions about child development...[that] permeate Kenyan early childhood guidelines and training...because the Kenyan Guidelines for Preschool Education (Kenya Institute of Education 2000) were based on earlier United Nations Children’s Fund (UNICEF) documents”. Adams and Swadener (2000:386) both American-based professors, acknowledge their input to the development of early childhood education (in its formative years) in Kenya. Swadener elaborates further on her input to early childhood research in Kenya (Swadener & Mutua, 2008:35). The ECE guidelines in Kenya as already outlined, has traces of DAP, which might reflect the effect of such collaborations. This is the reason I seek to explore teachers’ beliefs of DAP as reflected in the children’s educational experiences. I could have used the NACECE12 guidelines (mainly used by DICECE teachers), but my interest with a Montessori preschool13 motivated the choice of the DAP framework, whose theoretical and conceptual grounding in child development theory and learning might be inclusive of both systems of teaching. The following section I give a brief overview of the bioecological systems theory before clarifying the terms used in the study.

1.9 THE BIOECOLOGICAL SYSTEMS THEORY

The bioecological theory advanced by Bronfenbrenner and Morris (in Bronfenbrenner, 2005), proposes that an individual develops in the course of a lifespan within a context that is affecting and is being affected by the individual. The assumption of this theory is that child development takes place within an ecological set of four interacting systems,

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12 The document originates from NACECE, so it is assumed that it guides the practices of preschool teachers who train under NACECE/DICECE.

13 Montessori teachers, assumed to be trained to reflect the international Montessori Methods curriculum might vary in their philosophy of child development.
namely the microsystem, the mesosystem, the exosystem and the macrosystem (Bronfenbrenner, 1972; 1979; 2000; 2005). These systems are organised in a spherical order around the child, beginning with the microsystem, as immediate, to the most peripheral macrosystem.

In this study, the bioecological theory’s proposal of locating people within interpersonal structures and roles as contexts for the child’s development is valuable. In particular, the concept of a dyad, formed whenever two persons pay attention or participate in one another’s activity is significant (Bronfenbrenner, 1979:56). Three levels of engagement are possible in dyads; firstly, the observational dyad occurs when one member pays close and sustained attention to the activity of the other, showing some level of acknowledgement. Observational learning results from this dyad. Such learning is reinforced especially when the interacting party makes an overt reference to the attention displayed. Secondly, the ecological systems theory proposes that a joint activity between dyads evolves from the observational dyad (Bronfenbrenner, 1979:56). At this engagement level, the two interacting partners are engaged in an activity which may not necessarily be the same but similar, sometimes just being part of a whole. Herein rests the power of reciprocity as a significant basis for further sustained learning (Bronfenbrenner, 1979:57). He suggested an existence of differential power status, with the developing individual possessing less power than the knowledgeable person does. Consequently, for optimal learning to take place, the developing child individual should be allowed space for independence as he/she gradually takes over responsibility for present as well as future learning (Bronfenbrenner, 1979:58). In the course of a joint activity dyad, feelings that could be mutually positive, negative, ambivalent or asymmetrical could develop. The third type of dyad is the primary dyad. According to Bronfenbrenner (1979:58), this dyadic relationship only exists conceptually, even when the two parties are not physically together. This type of relationship motivates development in the absence or presence of the influencing party.

Bronfenbrenner (1979:85) also suggest that roles as contexts of development define how individuals play different roles in society to define their social positions and the subsequent role expectations. Accordingly, he defined a role as a “set of activities and relations expected of a person occupying a particular position in society and of others in relation to that person (Bronfenbrenner, 1979:85). Therefore, according to this definition
and principles outlined by Bronfenbrenner in relation to the dyads, a preschool teacher is in a reciprocally dynamic relationship with others in the social system in relation to their role as teachers. Such others include children, parents, the directors of schools and curriculum developers. Within the framework of such divergent role expectations, the preschool teacher is expected to satisfy all expected roles. Likewise, the teacher expects the others associated with her/him in relation to her/his role to reciprocate in their respective roles.

Using this theory to understand the dynamics of children’s educational experiences and teachers’ beliefs, I conceptualise preschool education within the four components of the bioecological systems. These various systems each have components and effects on ECE provision. The child and the teacher are each situated in the microsystem, but at different levels. Moreover, I situate teachers’ beliefs as being affected by the microsystem (individual experiential level), the exosystem (as in the case of training and interaction with colleagues) that affect children’s educational experiences and teachers’ beliefs as experiences located in the microsystem, but which have factors located in the other systems affecting them. Within the dynamics of the bioecological theory, teachers too have roles to play with regards to the children’s educational experiences, which are intricately linked to the entire social, cultural and political spectrum of school provision. Although the bioecological theory might suggest various levels of development with focus on the child, I extend development in the various systems located in the bioecological systems theory to include influence on parents, teachers and other stakeholders in preschool provision. The dynamics of the interplay between the bioecological systems components and the provision of ECE in Kenya is discussed in voyage seven. Figure 2 below illustrates the components of the bioecological theory.
1.10 CONCEPTUALIZED TERMINOLOGY

VandenBos (2007:210) defines a concept as “an idea that represents a class of objects or events and their properties…” Therefore, in the following section I conceptualize the terms ‘educational experiences’, ‘teachers’ beliefs’, and ‘developmentally appropriate educational practices’.

**Educational experiences:** I use this term to include the content [what] and method [how] used by the teacher in the formal learning activities, planned for children’s acquisition of knowledge, skills and values related to language and arithmetic activities.

**Teacher beliefs:** VandenBos (2007:112) defines a belief as “a more generally acceptance of the truth, reality or validity of something”. In this study, I use the concept to refer to the overall worldview that teachers embrace in interpreting their practice in relation to children’s educational experiences, and the external factors that relate to such a worldview. Such a worldview, I assume originate from both real as well as hypothetical experiences that teachers have in their daily interactions with children and the larger society. Because of a dynamic social context and practical experiences with
children, I conceptualize that teacher perceptions and their plan for children’s educational experiences become complex.

**Developmentally appropriate educational practices:** DAP\(^{14}\) assumes age and individual appropriateness of children’s educational activities (Bredekamp in Charlesworth *et al*., 1993:12). Consequently, I add the educational component (henceforth DAEP\(^{15}\)), to stress all those activities that teachers adopt for children’s educational processes (*content and method*), suitable for their developmental level according to theorists such as Piaget, Vygotsky, Dewey, Pestallozi, Montessori, and Erickson, among others, and their perspectives of how children develop and learn. This is because DAP, which originated from child development theory, “is a real and useful construct” (Charlesworth *et al*., 1993:23). Central to the DAP framework is child-centred activities in culturally sensitive environments (Bredekamp & Copple, 1997; Charlesworth *et al*., 1993; Klein & Chen, 2001; Kostelik *et al*., 2004: Jalongo *et al*., 2004).

1.11 **DEFINITION OF TERMS**

I have specified actions or operations necessary to identify the terms (Fraenkel & Wallen, 2006:30), to make their reference and meaning explicit. In some instances, dictionary definitions are limited so I adapt the following meanings:

**Developmentally appropriate practice:** As already footnoted, the term ‘DAP’ is widely used to refer to “teaching based on how children grow and develop” (Morrison, 2006:394). This concept originated from the USA in 1986, based on a two-year study of research into early childhood education by the National Association for the Education of Young Children (NAEYC). The position statement provides a synthesis of the appropriate curriculum, learning activities, adult-child interaction, home-program relations, and the evaluation of child development (Beaty, 1996:4). Although this guideline was intended for the USA, it has been widely disseminated and published and has impacted on curricular beliefs and practices throughout the world, because its definition and scope is benchmarked on principles of child development that are thought to be universal (McMullen *et al*., 2005:451). In this study, the set of twelve principles

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\(^{14}\) I use DAP to refer to the original template as found in ECE literature.

\(^{15}\) I use DAEP specifically in my study to stress the educational components; content and process inherent in the DAP framework.
that synthesise the DAP view will be referred to as the ‘DAP template’ or ‘DAP principles’.

**Developmentally Appropriate Educational Practices:** As already noted in the section ‘setting the stage for the journey’ in this study, these refer to the discussion of the five constructs used in the study: teaching strategy, use of materials, scheduling, assessment and consideration for children’s individuality, in juxtaposition to DAP.

**Education:** VandenBos (2007:314) defines education as “the process of teaching or acquiring knowledge, skills and values”. I use the term to refer to teaching and learning strategies, which include the process used, and the content that the teachers plan for children to acquire knowledge, skills and values.

**Developmental stage:** VandenBos (2007:275) define the development stage as “a period of development during which specific abilities and characteristics or behavioural patterns appear”. In this study, it involves children between four and five years of age, and I extend it to embrace cultural expectations of the learning capabilities of the preschoolers, as determined by context variables. This is based on the assumption that there are educational activities at the preschool that should be suitable for children in this age range.

**Practice:** Kostelnik et al. (2004:59) define practice as the “use of new behaviour or knowledge repeatedly and in a variety of ways”.

**Academic preschools:** I coined this phrase exclusively to refer to those schools where teachers occupy children between three and five years predominantly with paper and pen assignments during classroom activities. Additionally, the term refers to schools that are highly structured towards the acquisition of ‘the 3Rs’ (reading, writing and arithmetic skills). A high level of content and subject-based structure prevailing in the school timetable categorizes such schools as ‘academic’.

**Academise:** I coined this term to refer to instances whereby the preschool teacher overloads preschool children with written tasks during the learning activities.
Constructivist learning: Morrison (2006:393) defines a constructivist process of learning “as a continuous mental organisation structuring and restructuring of experiences in relation to schemes of thought, or mental images which result in cognitive growth”. I use this term to encompass all the opportunities for children to contribute freely to knowledge generation through questioning and manipulation of materials. The child could do this independently or with the guidance and support of the teacher.


Montessori early childhood development: Early learning centres that use the Montessori early childhood curriculum.

Montessori Method: This a method based on Dr. Montessori’s belief that children actively engage with their environment using self-correcting material (Collins & O’Brien, 2003:225; Montessori, 1920).

Montessori teachers: These are teachers trained under the Montessori philosophy and who teach at Montessori or DICECE oriented preschools.


Preschool/nursery/kindergarten/early childhood education and care: In Kenya, these terms are used interchangeably to refer to child education before six-years-of-age. In Kenya, most children start school at the age of three-to-five years and it is divided into three levels; baby class (three years), middle class (four years) and top class (five years). Most of the preschools do not have a primary school attached to them. Qualifying children move to different primary schools, often within the same locality (NACECE, 1999:20). I use the term preschool to refer to the education of children between three and five years.

Preschool teacher: The Oxford Dictionary of English (Soanes, & Stevenson 2005:1809; 1381) defines a teacher as “a person who teaches especially in school”. In addition, it
defines preschool as “relating to the time before a child is old enough to go to school”. Additionally, Collins and O’Brien (2003:279) define preschool as “care and curriculum designed to meet the needs of children ages three to five years…” I use the phrase “preschool teacher” therefore to refer to an adult who has received qualification in early childhood training and who cares for children between three and five in centre-based care.

**Primary school:** After three years in preschool, children at the age of six, often admitted through a written test, enter primary school for eight years, (graded standard one to standard eight). At the end of eight years in primary school, candidates sit for Kenya Primary School Certificate of Education (KCPE), to qualify for secondary selection (Marlow-Ferguson, 2002:738).

**Highly structured approach:** I coined this phrase during data analysis to refer to limited flexibility in most lessons.

**Subject-based approach:** A phrase that I coined during data analysis based on the content covered during the lesson that reflects isolated subjects such as Arithmetic, Kiswahili or English.

**On-time schedule planning:** This is a phrase used to denote the amount of time allowed for the completion of tasks.

**Teaching strategy:** This means the general and specific approach used by a teacher to engage the children in the learning process.

**Learning materials:** These are all the tangible manipulative materials available for the children to use in the learning process.

**Silencing of materials:** I use the metaphor of ‘silenced materials’ throughout the study, as an illustration that although teachers had materials and opportunities to use them they did not engage children with these.

**Learner differences/individuality/differentiation:** These terms refer to children’s differences based on their learning abilities and tempo in task completion.
Assessment: In this study, the term is limited to how teachers appraised the children’s educational experiences.

The interview: this is an entry examination presented to five- and six-year-old children as a qualifying examination to join primary school.

Chasing the interview: Is a phrase that I derived from the interviews with the teachers, expressing their haste to engage children with academic subjects.

The preschool teaching seesaw model: I derived this terminology from the interview data where teachers seemed to emphasize child-centred approaches while they used teacher-directed approaches.

1.12 ASSUMPTIONS OF THE STUDY

For the sake of this study, I make the following assumptions:

1. I assumed that teachers who are trained are conversant with theories of child development, which largely contribute to the DAP framework (Charlesworth et al., 1993:23). DAP is largely influenced by Piaget, Vygotsky and Erikson (Kostelnik et al., 2004:20; Rushton & Larkin, 2001:26).

2. In addition, I also assumed that the teachers trained in various early curricula were free to implement DAP in their classes.

3. I also assumed that the DAP framework is not an ‘either or’- framework, pitting DAP, against DIP, but rather a set of flexible guidelines that exist on a continuum. The more child-centred, individually focused practices are, the more DAP it is; and that the more teacher-directed and centred practices are, the more DIP it is, and the less DAP it is (Charlesworth et al., 1993; Kostelnik et al., 2004:33-9 Stipek, in Kontos & Dunn, 1993, Stipek et al., 1995:220). Therefore, I assumed that children’s educational experiences would fall within the DAP-DIP continuum.

4. I further assumed that preschool teachers held beliefs that relate to children’s educational experiences, and that this would form the basis of our discussion.

5. I assumed that teachers are capable of linking their beliefs to a developmentally appropriate practices framework.
1.13 THE OUTLINE OF THE ENTIRE VOYAGE

Voyage number one: The beginning of this academic journey locates the genesis of my topic in my own preschool experiences in juxtaposition to my professional career as a university lecturer, my role conflict as a mother of a preschooler, and the general dynamics of education in general and of preschool provision in particular, in the Kenyan context.

Voyage number two: In this part of the journey, I provide an academic link between my study and those of others who have either conceptualised or researched issues related to the historical background of preschool provision. The areas covered include the origins of ideas guiding ECE, a brief overview of the progenitors of these ideas and a detailed explanation of Montessori principles (because one of my study sites was a Montessori preschool) is covered. In addition, three views of readiness, rationale for interest in ECE, empirical studies related to teachers’ beliefs and developmentally appropriate practices and reviewed.

Voyage number three: In this part of the journey, I justify my adoption of the constructivist paradigm after engaging with the paradigm contestations. I also provide details of the three methods of data collection, namely: observation using video and photography, and interviewing through visual elicitation. I also provide a summary of the study context and participants, in addition to the ethical principles of confidentiality, voluntary participation, and sensitivity to participants.

Voyage number four: This section presents a qualitative data analysis framework and outline of the way I derived the themes in the study from a combination of a bottom-up/grounded theory (inductive) approach and a priori (deductive analysis). The themes derived from the inductive analysis are subsumed into five DAP constructs; teaching strategy, use of materials, scheduling of activities, assessment and consideration for children’s individuality. In addition, it gives a summary of the criteria for credibility the current research that includes positionality, reflexivity, thick description, prolonged engagement, triangulation and generalisability.

Voyage number five: This is the data presentation and interpretation chapter. The themes derived in voyage four are presented as follows under the DAP constructs; Teaching strategy relates to the sub-themes on choral reading, copying and written task-based activities (teaching strategy), the sub-theme on use and silencing of materials is
presented under the main theme on use of materials. I present the third sub-theme of subject-based schedules that embraced the use of schemes of work under scheduling of children’s work. Assessment that reflected a subject-based approach limited to paper and pencil workbooks that focused on academic content is presented as the fourth sub-theme under assessment. Children’s differential abilities that were expressed in differentiated copying and written task-based activities, but did not consider the tempo and interest of the children are presented as the last theme.

**Voyage number six**: This voyage is a synthesis of the factors that influence preschool teachers’ beliefs of DAEP. These factors are linked to several sources of perceived pressure, such as preparation for the transition interview, different transition curricula, peer pressure, perceived competitive school environment, and responses to the changing times.

**Voyage number seven**: In this voyage, I extrapolate the themes into a DAP framework and Maria Montessori principles that are subsumed in the bioecological theory of development. In this voyage, I explore and advance a seesaw model for understanding preschool teachers’ beliefs of developmentally appropriate practices.

**Voyage number eight**: This voyage presents a synthesis of the findings, conclusions and recommendation for further research and practice.

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**A brief sojourn after voyage one**

*We need to review what we have ‘seen’ and ‘heard’ so far…*

*In summary, chapter one dealt with;*

*The purpose and justification for the study of the study*

*The research questions;*

*Who is Rose in the study?*

*A brief background to the study*

*Some definitions….conceptualized terminology*

*Assumptions of the study; A general structure of the thesis*

*So that we appreciate the need to go further along*

*On this journey*
VOYAGE TWO
LINKING WITH OTHER VOYAGERS
IN A SIMILAR DIRECTION

Preview of voyage two

1. Who else has travelled a similar road
   (Subject based literature)

2. What means of travel have others used?
   (Methods)

3. Whom did they take along on their journey (Participants)

4. Where did the binoculars focus?
   (Focus of previous studies)

How different will my voyage be...?
(My point of departure: Going my own way)
2.1 A GENERAL INTRODUCTION

“By necessity, by proclivity, and by delight, we all quote” Ralph Waldo Emerson (1803-1882).

The purpose of my literature review is three-fold; first, I provide a synopsis of the historical and philosophical foundations of early childhood education; second, I explore previous empirical studies to identify how my study links with them; and thirdly, I examine how my study complements previous studies. Figure 3 (below) gives a summary of the literature focus and the rationale for selection.

**FIGURE 3:** A summary of the focus and rationale for selected literature

The literature has two main sections: the first providing a general conceptual framework on early childhood education, the second exploring the empirical studies on teacher’s beliefs and developmentally appropriate practice (DAP). The focus of the former includes a general overview of the historical development of early childhood education, and the origins of the ideas guiding early child development and curriculum, including

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NB: DAP are 12 principles synthesized from empirical and conceptual literature about best practices for children’s education and development.
the Montessori philosophy and the rationale for interest in early childhood education services. In addition, I present three views of school readiness. The second part of the literature review explores empirical studies on teachers’ beliefs as they relate to their practices.

2.2 THE HISTORY OF EARLY CHILDHOOD EDUCATION

“By understanding and telling the story of the past, we are better equipped to interpret our own history, to have a sense of mission and purpose” (Gordon & Browne, 2000:8).

2.2.1 A GENERAL OVERVIEW

The following section explores the historical development of early childhood development (ECD) in general, and early childhood development and education (ECDE) in particular, as the two are interlinked (Braun & Edwards, 1972:8). Another term used for ECDE is early childcare and education (ECE), defined as “any care on a regular basis by someone other than a child’s immediate family members” (Altenhofen, Davy, & Biringen, 2008:295). I present distinct social and economic challenges over the centuries, together with the contributors to the ideas in education generally, and early childcare and education (ECE) in particular. Through this history one appreciates not only the dynamic conceptions of the child but also the practices of ECE used in many parts of the world today, that reflect the claim that history informs educational policy that guide ECE programs (Morrison, 2006:90; Prochner & Kabiru, 2008:117). I conclude this section with a synthesis of why it is relevant to know the historical developments in ECE.

The history of the origins and progression of ideas related to child development provide a holistic picture of the current practices (Morrison, 2006:90-91), and a possible glimpse into the future, since “children, by their very existence, [provide] the link from the past and present to the future” (Kristjansson, 2006:36). Social needs also affect the provision of education, since “a society’s definition of childhood influences how it educates its children” (Gordon & Browne, 2000:9), and the direction such education takes (Kilderry, Nolan & Noble, 2004:24).

Although this review derives from a predominantly Western view of the child, a context that might be different from the current study context, authors have acknowledged that
ideologies originating from the West have influenced teacher training and the development of ECE curriculum in some developing countries, such as Kenya (Adams & Swadener, 2000; Prochner & Kabiru, 2008; Pence & Marfo, 2008). Educational practices in many parts of the world are offshoots of ideas originating from Greece and Rome (Gordon & Browne, 2000:9), which have continued to infiltrate educational practices throughout the world. These ideas spread either through colonial influences, (Gakuru; Hyde & Kabiru, in Prochner & Kabiru, 2008:126; Pence & Marfo, 2008:82; Trawick-Smith, 2003:20), through conferences and other publications (McMullen et al., 2005:463), or through workshops and collaborations (Adams & Swadener, 2000:386). Lately, such technology as the internet has made ideas even more porous and readily available than previously possible. Knight (cited by Kilderry et al., 2004:27) refers to this as a “new knowledge-based society”.

Consequent to this proliferation of ideas in education, and of information generally, ECDE has taken different directions over the years. The approach that adults take towards the development, care and education of children depends on a society’s perception and value attached to children and childhood. Notions of childhood invariably vary in time and place (Fromberg, 2007:467; Gordon & Browne, 2000:8; Kilderry et al., 2004:24; Kristjansson, 2006:20; Monighan-Naurot 2005:3 Penn, 2000:9; Robinson & Diaz, 2006:6; Samuelsson, 2006:115; Smidt, 2006:5; deMause in Trawick-Smith 2003:17;Wayness, 2006). The perception of children which invariable affects their development is dynamic and variable in cultural contexts as expressed in the following sentiment:

... images of childhood have changed over time and do change with place ... conceptions people have about childhood will relate not only to childhood itself but also to attitudes to children…to how they learn and develop morally, intellectually and emotionally, and what their rights are (Smidt, 2006:4).

Through time, conceptions of the child and of childhood have continued to change. The following section captures some of the developments that have influenced childhood education from the 18th through the 20th century period. Alongside the developments are the people who contributed to ECDE as it is known today.
2.2.2 THE 18TH AND 19TH CENTURY PERCEPTION OF CHILDREN AND CHILDHOOD

During the 18th century, childcare served to purify the child’s inherent evil nature (Gordon & Browne, 2000:10; Smidt, 2006:5; Pollock, in Trawick-Smith, 2003:17; Weber, in Monighan-Nourot, 2005:3). During this period, a puritan ethos in the church dominated the psyche of society (Gordon & Browne, 2000:10), and a belief that children inherited the essentially evil nature of man at birth. Therefore, education began at the age of 7 years, when society considered the child as a miniature adult (Braun & Edwards, 1972:7; Henson, 2003:7). The ‘dame schools’ in America then became contexts for moral and spiritual cleansing, aimed at ridding children of that inherent evil (Weber, in Monighan-Naurot, 2005:3), often by “beating the devil out of them” (Pollock, in Trawick-Smith, 2003:17). To counter what was termed by some ‘original sin’, after Eve and Adam’s transgressions in the Biblical Garden of Eden, the children were made to sit up straight while memorising and reciting verses. This was a particularly valued activity, since writing and reading materials were also scarce. Consequently, learning was limited to memorization and recitation of the Psalms and alphabetical symbols (Monighan-Nourot, 2005:3-4). Heavy discipline, which included corporal punishment, sitting on ‘the shame bench’ and the wearing of a dunce’s cap predominated (Gutek, in Monighan-Nourot, 2005:3).

This became ‘the dark age’ for children who society considered as non-persons, lacking identity, care and appreciation (Braun & Edwards, 1972:3; Gordon & Browne, 2000:10; Aries; Bjorklund & Bjorklund both in Trawick-Smith, 2003:17). Classical European education was a preserve of the upper-classes, and then it was mainly for boys (Braun & Edwards, 1972:24; Monighan-Nourot, 2005:4; Gordon & Browne, 2000:9). If girls were educated it was often merely training in domestic work or trade, and then for the middle-class only (Gordon & Browne, 2000:9).

However, the value of children changed in the 19th century, as a period of ‘enlightenment’ for parents and society emerged (Trawick-Smith, 2003:17; Smidt, 2006:3). In contrast to the view of an ‘evil child’, Rousseau’s competing idea of a ‘naturally good’ child, expressed in his book ‘Emile’ (1762), advanced childhood as a unique period that parents and teachers should respect (Smidt, 2006:5; Trawick-Smith, 2003:17; Warner & Sower, 2005:4). Universal education and literacy for all replaced the
ideas of an inherently evil child, and there was a reaction to gender, class, and racial bias in schools, which now taught reading, writing, arithmetic and bookkeeping (Gordon & Browne, 2000:10). Emerging during this time was a more considerate and encompassing attitude to the social training of children (DeMause, in Trawick-Smith, 2003:17). Children growing up during this period received physical, emotional, social and intellectual care (Trawick-Smith, 2003:17). At the same time, there began an integrated curriculum for early childhood education. Therefore, some of the basic principles advanced to guide early childhood, such as the ‘whole child’ philosophy, can be said to have had their origins in the 19th century thinking. In the following section I preview the progenitors of some of the ideas that prevail in ECE today. Several people advanced many ideas that guide it, including John Amos Comenius (a Czech educator, 1592-1670), John Locke (1632-1714), Jean Jacques Rousseau (1712-1778), and Johann Heinrich Pestalozzi (1746-1827) (Morrison, 2006:95-121).

In conclusion, the ideas advanced during the 19th century laid a foundation for the 20th century advancement of ECE ideas. Although each of the contributors during this period emphasized different views about children, most of them underscored their individuality, nurturance through manipulation of materials, and an environment that respected their autonomy. These ideas prevail today (Blakemore & Frith, 2005:461; Bredekamp & Copple, 1997:125; Broadhead, 2001:34; Crowther & Wellhousen, 2004:185; Jalongo et al., 2004; Montessori, 1920:23). The 20th century contributors later refined these ideas to guide early childhood education. The following section previews some of the ideas advanced during this time.

2.2.3 THE 20TH CENTURY PROGRESSION OF EARLY CHILDHOOD IDEAS

“The 20th century has been called the century of the child” (Gordon & Browne, 2000:162).

The contributors who continued to advance the needs of the child during this period include Maria Montessori (1870-1952), the first female physician in Italy, John Dewey (1859-1952), grouped among Progressive educators, and G. Stanley Hall (1844-1924), who is credited with the Child Study Movement. Arnold Gesell (1880-1961), a student of Hall and a co-pioneer advanced this Movement through laboratory observations of the norms of child behaviour. Experiments on normative behaviour led to conclusions of
characteristic age-appropriate development, as it is known today (Monighan-Nourot, 2005:13). The Child Study Movement and ideas about teaching were influenced by the ideas of Jean Piaget (1896-1980) and Lev Vygotsky (1896-1934). John Dewey became one of the most influential theorists behind American education and philosophy (Henson, 2003:9; Morrison, 2006:100). However, details of all the 20th century contributors to ECE, except those of Montessori, are beyond the scope of this review. In the following section I consider the current view of the child and of childhood.

2.2.4 THE PRESENT IS HERE: CHILDHOOD IN THE 21ST CENTURY

Childhood across different cultures and historical points in time means that there are multiple and different readings and experiences of what it means to be a child; therefore, understandings of childhood are not fixed (Robinson & Diaz, 2006:6).

In the 21st century, despite the dominant Western ideas that still define and guide early childhood education in many parts of the world, authors predict a changing view of childhood and children that should reflect their unique circumstances. These circumstances arise from political, historical and socio-economic realities, all of which cohere to constitute a multi-cultural perspective of children today (Pence & Marfo, 2008:79-80; Robinson & Diaz, 2006:6; Smidt, 2006:14). For example, Smidt (2006:5) argues for an ephemeral and a culturally situated childhood, because childhood and children are a creation of adults fashioned in “time and place, responding to the economic, political, and religious, class, and political influences and challenges in place”. Trawick-Smith (2003:22) adds that the children of the world have their own unique identity, originating from their historical roots and cultural practices. Pence and Marfo (2008:82) argue for the development of culturally situated ECD practices in Sub-Saharan Africa that respond to cultural diversity. The bioecological systems theory, which is adapted to understand the practices observed in the current study, advances the latter position.

The discourse towards de-centred childhood and pedagogical practices originate from postcolonial theories, among them, critical theory and other social theories such as the bioecological systems theory (Bronfenbrenner, 1979; 2005; Thomas, 2000:403-3). In the 21st century, the move from the notion of the ‘universal child’ (Robinson & Diaz, 2006:6), continue to advance a concept of childhood and children within a social context
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in which children grow, because such social dynamics and their impact vary by context (Koops, 2004:13; Kilderry et al., 2004; Warner & Sower, 2005:24; Wyness, 2006). Kristjansson (2006:20-1) captures how the notion of the ‘child’ presented in two dichotomies, the prospective and the here and now, might influence the value attached to childhood and children. In the former, society values children because they are a future asset to themselves, their families and society, as vehicles of cultural transmission.

Different views of childhood pertain in various societies. Some societies emphasize childlike features as prospective assets related to adulthood, and the faster children develop towards adulthood, the better. This is the pragmatic view of children as future assets (Hirsch, in Saracho & Spodek, 2003:181; Kristjansson, 2006:20-1). In other societies, the romantic view of childhood that emphasizes the here and now view of children value childhood for its own sake. This view of childhood values child-like attributes, such as playfulness, fantasy and childish orientation, positively; hence, it is developmentally important for children to play more than receive instruction from adults (Kristjansson, 2006:21; Saracho & Spodek in Saracho & Spodek, 2003:181). The contrary might be true for the prospective view.

The typology of the value of children advanced by Kristjansson (2006) is imperative to the DAP template, as the set of principles that distinguish childhood as a unique period of growth (Saracho & Spodek, 2002:181). Whereas the pragmatic prospective view is likely to develop future survival skills among children, the romantic or here and now view is likely to embrace playfulness and fantasy among children, allowing them to enjoy and develop holistically in their childhood.

Consequently, political, economic, and social reforms, plus the value attached to children, have influenced changes in the view of children and their curriculum throughout history. The review of the historical developments of ideas related to children and childhood is significant because most of the ‘current innovations’ models of curriculum are offshoots of developments from historical times (Saracho & Spodek, 2003:176). While Wyness (2006:145) notes that schools are sites that children develop ‘routines and form habits that determine their broader social position’, Wishard et al. (2003:96) conclude that children’s daily experiences in childcare are entrenched in social, cultural and historical values of the community. Therefore, in the 21st century, childcare advocates advance a view of children that is culturally, politically and socially
sensitive to capture the reality, not of a universal childhood, but one that embrace diversity and difference. In the next section, I present the historical trends that have shaped ECE, before considering the Montessori curriculum in the subsequent section.

2.2.5 CONCLUDING REMARKS: ORIGINS OF EARLY CHILDHOOD EDUCATION

The review of the historical development, and of individuals who contributed to the development of ideas guiding ECE, as it is known in many parts of the world, provides insight into the methods and approaches for teaching children. It presents educational experiences observed in the current study, with the DAP template having derived its principles on the conceptual and empirical research during the 19th and 20th century. The following section gives a brief of the Montessori system of education.

2.2.6 MONTESSORI SYSTEM OF EDUCATION

The following section introduces the origins of the Montessori curriculum, besides the principles inherent in the method. In addition, I link the Montessori approach to the DAP principles. This provides a perspective on the expectations of preschool educational experiences in the Montessori preschool observed.

2.2.6.1 The origins of Maria Montessori philosophy

Maria Montessori (1870-1952) was a female Italian physician who worked with poor and cognitively challenged children living in the slum areas of Rome. She opened a school within a house called Casa dei Bambini (the children’s house) in 1907 to motivate and provide a learning environment suited to these children’s needs (Braun & Edwards, 1972:111; Gordon & Browne, 2000:15; Grisham-Brown et al., 2005:28-9; Torrence & Chattin-McNichols, 2005:363; Montessori, 1920:43; Morgan, 2007:35; VandenBos, 2007:590). These children’s houses were later to accommodate children both with and without physiological challenges, and where Montessori continued to refine her teaching method.

Based on her experiences at the children’s houses, Montessori developed a philosophy and a theory of child development (Gordon & Browne, 2003:15; Montessori, 1920; Morgan, 2007:35). Froebel greatly influenced her educational philosophy, while Edouard Senguin influenced both her method and materials’ design, especially those related to
sense training (Braun & Edwards, 1972:110). Montessori’s curriculum emphasizes an education through the senses. The following section is a brief about the basic principles of Montessori learning.

2.2.6.2 Principles of Montessori learning

Montessori believed that education should enhance the psychological development of the child, through interaction with a ‘prepared environment’, rather than teaching them *per se* (Braun & Edwards, 1972:119; Wolf, in Monighan-Nourot, 2005:16; Montessori, 1920; Morgan, 2007:38; Santrock, 2001:520). In her view, learning results from a ‘prepared environment’ with a sense of order and freedom of guided expression, with carefully sequenced materials that represented various stages of difficulty for the child (Gordon & Browne, 2000:16; Monighan-Nourot, 2005:16; Montessori, 1920). Contrasting her view with what she considered as pedagogic slavery, where children had little freedom for self-expression, Montessori observed:

> Slavery still pervades pedagogy, and …schools. I need only one proof-the stationary desks and chairs like a butterfly mounted on pins, each fastened to his place, the desk, spreading the useless wings of barren and meaningless knowledge they have acquired (Montessori, 1920:14-15).

As part of the Montessori curriculum, each child ought to experience freedom of movement as it suits his or her interest and current level of mastery. Therefore, Montessori emphasized the role of individualized attention, as children learn through self-correcting materials that involve touch, thermal, visual, and auditory senses as the source of their cognitive development (VandenBos, 2007:590).

In her view, even without teaching words to children, sensory experiences do lead to the development of vocabulary. She also developed materials for reading, writing and arithmetic, such as wooden cylinders, geometric insets, sandpaper letters, and graded rods (Braun & Edwards, 1972:119; Montessori, 1920). Montessori became the first educationist to recognize that children’s furniture should match their body size (Gordon & Browne, 2000:15; Torrence & Chattin-McNichols, 2005:365; Montessori, 1920).

Montessori philosophy has transcended its original Roman borders to many parts of the world, although its first appearance in America in 1909 had a poor reception because the flexibility of methods and variable interpretations were prone to misinterpretation. In
addition, parents’ demands for a focus in academics led to the rejection of the Montessori Method (Chattin-McNichols in Gordon & Browne, 2000:16). However, this trend was reversed in the late 1950s and 1960s through the second American Montessori Society, founded by Dr. Nancy McCormick Rambusch, as a response to the differences between Europeans and Americans regarding the approach to Montessori curriculum (Gordon & Browne, 2000:16).

Torrence and Chattin-McNichols (2005:363) conclude that despite an earlier perception that Montessori’s ideas were radical, current theories in early education have changed to reflect what Montessori proposed. Consequently, such changes are currently reflected in ECE that incorporate such principles as material manipulations by children, an acknowledgement that the preschool is the ‘sensitive period’, or an aspect of the ‘window of opportunity theory’ (Sorgen, in Ruston & Larkin, 2001:30), when the timing of providing certain developmental opportunities has more impact on the child. The inclusion of parents as partners in their children’s education is also one of Montessori’s recommendations (Shute, in Torrence & Chattin-McNichols, 2005:364). The Montessori method has continued to spread out to many parts of the world (Morgan, 2007:36); with some American states indicating a doubling in Montessori schools in recent years (Saracho & Spodek, 2003:175). In Kenya, the increase in Montessori schools appears undocumented, but the presence of teacher training colleges in the country that train Montessori teachers points to the likelihood of a possible increase in preschools that offer Montessori education. In the next section, I examine current notions of children and childhood, which invariably affect ECE, before turning to the views of readiness, that have link with the historical development of ECDE.

2.2.6.3 Relating Montessori Method and DAP principles

The value of sensorial materials to train the child’s senses are emphasized in the Montessori system of education, just as DAP recommends that children should engage actively in their environment to construct knowledge (Blakemore & Frith, 2005:461; Bredekamp & Copple, 1997:125; Broadhead, 2001:34; Crowther & Wellhousen, 2004:185; Foot et al., 2004:144; Montessori, 1920:23; Seefeldt & Wasik, 2006:16-17). DAP emphasizes the uniqueness of children in their modal ways of learning. Children use different modal ways to learn, such as, auditory, tactile, visual, taste and smell. This
was Montessori’s basic assumption when she proposed several types of materials that children could use (Montessori, 1920).

Montessori proposed that as part of language development, the directress question children about “whether they have shown in their family what they have learnt at school” (Montessori, 1920:124), an activity that recognised parents as partners in the child’s education. DAP underscores the value of recognising children’s backgrounds, and their strengths and weakness, as part of their learning, to reflect their social-cultural diversity and their unique approach to learning (Bredekamp & Copple, 1997; Charlesworth et al., 1993; Charlesworth, 1998; Grisham-Brown et al., 2005; Jalongo et al., 2004:144; Klein & Chen, 2001:17; Kontos & Dunn, 1993; Kostelnik et al., 2004). Multi-age grouping in Montessori early learning encourages a sense of community, peer-teaching, flexible group work and collaborative learning (Kostelnik et al., 2004:32). The DAP principles recognize the value of developing a sense of community among learners (NAEYC, 1997; 2009).

Because Montessori emphasized the principles that recognize the value of the child’s education through the senses (their bodies), an individualized approach to learning that suits each child’s unique style of learning, and the involvement of the parents in the education of their children, seems to foreground the principles of DAP. Literature on early childhood often considers the Montessori Method to embrace DAP (Grisham-Brown et al., 2005; Kostelnik et al., 2004). The following section is a review of views of children’s readiness that might shape the ECE pedagogy.

2.3 THREE VIEWS OF CHILDREN’S READINESS

“With theoretical underpinnings…we have tools with which to make our way into the world of children and early childhood education” (Gordon & Browne, 2000:162).

2.3.1 INTRODUCTION

In this section, I consider three views of children’s readiness to understand the origin of best practices for children as advanced in the DAP template. These are the maturational, behaviourist and constructivist view of children, all of which have their origins in child development theories, the basis upon which teachers decide on children’s educational
experiences. For each view, there is more than one theorist contributing. However, I explore the basic ideas, rather than the theorists associated with them.

Theories of child development, learning or readiness to learn not only explain the dynamics of child development, but also the role that adults can play in children’s learning process (Charlesworth, 2008:90-91). Generally, readiness is an estimation of when and how children are ready to learn certain materials and to function successfully within a pre-determined curriculum (Kagan; Lewitt & Becker, both in Carlton & Winsler, 1999:338).

Seefeldt & Wasik (2006:22) observe that:

> Readiness is a fact. There is no doubt that some kinds of learning take place more easily and readily at a specific age…amount of previous learning determines the amount of new learning…Readiness is defined as being prepared and equipped-arranged for performance, immediate action, or use.

Perspectives on readiness influence the various dimensions of preschool provision such as “purpose for school, the process of schooling, children’s roles in the schooling process” as well as the role expected of both teachers and parents in the schooling process, all of which are influenced by culture (Morrison, 2006:223). Although the concept of school readiness has contested meanings for different stakeholders (Carlton & Winsler, 1999:338; DiBello & Neuharth-Pritchett, 2008; Morrison, 2006:219; Wasik & Seefeldt, 2006), a discussion of the three views of readiness clarifies some sources of contention.

### 2.3.2 The Maturational View of Readiness

Maturational theorists acknowledge that growth, development, and learning emerge from within the individual as natural processes predetermined at birth (Charlesworth, 2008:91; Gesell, in Seefeldt & Wasik, 2006:22; Trawick-Smith, 2003:37; Warner & Sower, 2005:42). The maturational view suggest that children’s growth processes advance through a series of invariant stages, with more skill and refinement in the later than the preceding stages, as the organism interacts with the environment (Carlton & Winsler, 1999; Seefeldt & Wasik, 2006:23; Warner & Sower, 2005:42). Hall and Gesell (cited in Carlton & Winsler, 1999:338; Trawick-Smith, 2003:37; Warner & Sower, 2005:44; Winter & Kelley, 2008) contributed to the development of theories linked to the
maturational view, which dominated early childhood thinking up to the first-half of the 20th century. Through his observations, Gesell delineated ages and stages of childhood. Therefore, according to the maturational view, the unfolding of the child’s internal processes is natural and occurs as the individual grows and matures, according to the genetic blueprint or a ‘pre-wired’ condition of the individual (Kostelnik et al., 2004:46-47; Trawick-Smith, 2003:37), suggesting a similarity of abilities among children of a certain age (Warner & Sower, 2005:42). However, this view could not explain development beyond the white middle-class cultures from which Gesell made his observations, since these did not include children from other cultures, races or classes (Dei et al., in Trawick-Smith, 2003:39). Besides, Gesell’s work met criticism for excluding children who did not fit within the normal range of development, culture or linguistic skills. The maturational theories could only explain what happens during maturation, and they did not explain the logic behind the unfolding of these innate tendencies. Maturation theorists suggest that before a child is ready, he or she cannot benefit from experiences, even when there is an interaction with the environment.

Some principles originating from the maturation proponents still guide preschool education to date. Seefeldt and Wasik, (2006:25) list some contributions to learning; firstly, maturationists support the unfolding of children’s abilities within conducive conditions (Jensen, in Seefeldt & Wasik, 2006:25). Secondly, the growth process can be predicted, regardless of individual variations, and thirdly, normal growth and development originates from maturation-related research (Bredekamp & Copple, 1997; Kostelnik et al., 2004:42-3; NAEYC, 1997:6). Proponents of the maturation theories support class repetition or ‘red shirting’ of children who have not attained a certain age (Cameron & Wilson, cited in Carlton & Winsler, 1999; Gay, in Seefeldt & Wasik, 2006). Consequently, teachers who subscribe to this view wait for the natural unfolding of innate ability, rather than speeding up the growth process (Seefeldt & Wasik, 2006:24) in view of the false belief that development precedes learning and given more time, the child might be ready (Carlton & Winsler, 1999:339).

However, maturational theorists seemed to overlook environmental influences on learning. Carlton and Winsler (1999) discuss problematic issues related to relying on the maturation perspective to determine a child’s school readiness-related experiences. First, readiness related non-standardised tests that are not culturally sensitive to children’s
prior experiences, exclude them from school, second, these tests do not discriminate between children who need special services or those who are not yet ‘ready’ and finally, the use of readiness related testing means more exclusion of children who cannot cope with a scaled up curriculum.

Although the maturation perspective presupposes universality of stages of growth and development, it does not fully explain variability of development, if the genetic makeup, which is never the same for any two human beings, is considered. However, the maturation-related theories and research are still useful explaining what the nature of childhood and the developmental needs for children at this stage.

Therefore, behaviourists countered this proposal by linking external experiences, rather than innate tendencies to human growth, development and learning. This alternative view follows in the next section.

2.3.3 THE BEHAVIOURAL VIEW OF READINESS

The behaviourists’ view of readiness contrasts with that of the maturational theorists, because they propose that the environment is critical to the processes of growth and development. The behavioural theories opposed the view that growth and development emerge because of the genetic unfolding; rather, they argue, growth and development results from people making stimulus-response connections in a progressive way to influence behaviour (Seefeldt & Wasik, 2006:25; Warner & Sower, 2005:43). Therefore, mental development and learning result from these neural connections.

Behaviourists include E.L. Thorndike (1874-1949), credited for his Stimulus-Response theory, and B.F. Skinner (1904-1990), who proposed the theory of operant conditioning. In this theory, Skinner proposed that consequences of behaviour result in learning. Moreover, learning is a cumulative process in which current learning builds on prior learning, as a cumulative process that leads to growth (Seefeldt & Wasik, 2006:25-26; Warner & Sower, 2005:43). Moreover, direct-instruction in which behaviour is broken into attainable outcomes originates from the behavioural theoretical orientation. This latter view mandates an active role for the teacher, who controls and guides the process of learning by designing the learning environment and focusing on certain skills and specific learning objectives (Seefeldt & Wasik, 2006:26).
However, despite the scientific basis of the stimulus-response connections in the learning process, the behavioural view of readiness faced criticism for its mechanistic view of the human being (Seefeldt & Wasik, 2006:27). Examples are teaching children isolated content that does not connect its themes, and drill practices aimed at simple recall that might limit children’s higher order thinking (Craig, in Seefeldt & Wasik, 2006:27). In addition, behavioural views of readiness appeared to present readiness as sequential, linear and hierarchical, hence ignoring the cultural context of the children’s learning. Such views fail to appreciate the multi-cultural ways of learning and expression (Brown, in Seefeldt & Wasik, 2006:27).

However, some of the best practices originate from the behaviourist view: teaching precise content with stated objectives leads to effective learning on which subsequent tasks build by assessing previous performance. Teachers are more confident about the goals for learning, because these focus learning objectives. In addition, teachers use the environment and reinforcement to promote children’s learning (Charlesworth, 2008:91; Gersten & George, in Seefeldt & Wasik, 2006:27-28).

In summary, the behavioural theories contribute to an understanding of the origins of the stimulus-response connections, and the role of the external environment in learning, growth and development. Moreover, these theories laid the foundation for stated learning outcomes. The next section provides a brief overview of the constructivist view, as an alternative view of children’s readiness.

### 2.3.4 THE CONSTRUCTIVIST VIEW OF READINESS

The constructivist approach to learning, growth and development provides an alternative view to readiness (Morrison, 2006:333). This view arose from the contention that human learning is complex, beyond the explanations given by the maturational and behavioural theories. It proposes that the interaction of both cognitive processes and environmental experiences are complimentary views to readiness (Morrison, 2006:103). Constructivists include Jean Piaget (1896-1980), Lev Vygotsky (1896-1934) and Dewey (Morrison, 2006:103; Seefeldt & Wasik, 2006:30). Constructivists assume that children are active in understanding their world (DeVries, Edmiaston, Zan, & Hildebrandt, 2002:35) and that ‘spontaneous play’ is the means to learn (Charlesworth, 2008:93). Although Dewey did not classify his ideas as constructivist, he suggested that learning integrates children’s
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social, physical, cognitive and emotional dimensions of development (Seefeldt & Wasik, 2006:30). Rushton and Larkin (2001:32) postulate that much of the modern educational terminology, such as integrated curriculum, whole-language, hands-on, authentic assessment and DAP, reflect brain-related research, but could also be rooted in Dewey’s philosophy, although Piaget remains the main proponent of constructivism (Charlesworth, 2008:93).

According to Piaget, cognitive development through the processes of assimilation, accommodation and equilibration is an incremental process as individuals construct new knowledge in their interaction with their social and physical worlds (DeVries & Zan, in DeVries et al., 2002:35). In his view, the cognitive processes change when an individual incorporates new information with prior knowledge, leading to the expansion of the schema and more knowledge acquisition. According to Piaget, individuals’ schemata vary, although they represent distinct developmental stages which children go through at almost similar age levels, albeit with slight individual and cultural variations (Morrison, 2006:103-108; Seefeldt & Wasik, 2006:28; 29; Warner & Sower, 2005:51-53).

However, to embrace culturally sensitive approaches, in addition to maturational perspectives and behavioural influences, alternative views exist. These views embrace the impact of the socio-cultural context in human growth and development. Vygotsky’s (1896-1934) ideas embrace this view. Like Piaget, he believed that maturational and environmental influences interface to explain learning. He emphasized the role of socio-cultural processes that invariably differ on their impact on the child at different stages of life, emphasizing the role of adults in ‘scaffolding’ the child’s ‘actual developmental level’ to higher levels of problem-solving. He referred to the difference between the two levels of achievement as the ‘zone of proximal development’ (ZPD). Vygotsky’s ZDP is the difference between what the child is capable of achieving and its attempt to engage with a new experience, which the teacher needs to scaffold (Charlesworth, 2008:93-94; Morrison, 2006:109-110; Seefeldt & Wasik, 2006:28-29; Vygotsky, 1978; Warner & Sower, 2005:50).

In summary, the constructivist theories emphasize the interaction of both the maturational and environmental influences in readiness. In education, teachers are encouraged to observe the child and be ready to bridge the ZPD. In addition, the constructivist view recognizes children’s dialogue as a means of assessing their current
maturational level and cognitive ability that additional environmental stimulation can enhance.

2.3.5 **CONCLUDING REMARKS: THE SIGNIFICANCE OF THE THEORIES OF READINESS**

The theories that explain child development originate from the historical developments in education and philosophy, all of which advance long-term ideas about how human growth and development relates to learning. As discussed, literature on theories of readiness present three alternative views; first, the maturational view, that stresses the role of inherent genetic influences; second, the behaviourist view, that proposes the impact of environmental or ecological influences, and third, the constructivist view, that combines both maturational and environmental influences to explain readiness and development. Consciously or not, these theories of readiness (child development) shape teacher training programmes and the professional knowledge that they apply in their classrooms. Charlesworth concludes that “the theorists [linked to various views of readiness]…view the adult role in learning a little differently” (Charlesworth, 2008:91). In addition, the developmentally appropriate template appears to have derived most of its principles from the theories of learning and child development. Consequently, theories of readiness provide insight into the possible range of children’s educational experiences, besides a framework for data interpretation.

Western-based research on ECE, and the general trends in child education and development borrow from ideas which originated from Europe and North America (Neuman, 2005:188; McMullen *et al.*, 2005:463; Monighan-Nourot, 2005:12; Nutbrown, 2002:1-3; Woodhead, 2002:15; Penn, 2000:8). The British nursery school and the German Kindergarten had influences on African ECD, including those in Kenya, South Africa and Namibia (Prochner & Kabiru, 2008:121-122). The ideas affect programmes across the developing ‘majority’ world, including Africa, where over 90% of the world’s children live, outside the Euro-Western ‘minority world’; yet the vast majority of developmental and ECD literature comes from the former, in particular from the US (Pence & Marfo, 2008:80; Smidt, 2007:64).

In Kenya, collaboration between Kenyan and early childhood experts from the USA in the early 1990s, and the contributions of the World Bank, in addition to the government’s collaboration with the Bernard Van Leer Foundation from 1972 to 1982, shaped the development of the ECE curriculum (Adams & Swadener, 2000:386;
Republic of Kenya & UNESCO, 2005:17). In Kenya, the roots of ECE date back to the pre-independence period in the 1940s, when the colonial government established the first preschools for European and Asian children, mainly in coffee, tea and sugar plantations (Republic of Kenya & UNESCO, 2005:17). Penn, citing the case of Namibia, provides a critical review of how donor agencies such as the World Bank use Western Models such as DAP to make local programme policies, “despite its limited evidence base and cultural narrowness” (2008:383).

Pence and Marfo (2008) and Penn (2008) correctly argue that early childhood frameworks need to reflect cultural sensitivity to reflect child rearing experiences and the circumstances in which children grow and develop. Penn (2008) further questions the applicability to the African context, of Western-based models that might include the DAP framework due to the varying contexts. However, regardless of what might seem to be cultural insensitivity of the DAP framework to children’s development contexts; it might still be useful to use it as a guideline rather than a prescriptive document. Moreover, it is also useful to apply and appraise it in different cultural contexts. As part of making the DAP framework relevant to different cultural context, the subsequent revisions of DAP provide room for cultural sensitivity, as an open entry point into the DAP framework culture, regardless of perceived diversity (NAEYC 1997; 2009). DAP, having had its origins in theories and empirical research on human development and learning, the basis upon which early childhood teachers, and educators in general, are still trained, means that DAP might not be easily dismissible.

To conclude, the historical, social, political, and economic developments might influence current preschool policy and pedagogic practices (Monighan-Nourot, 2005:12; Morrison, 2006:90; Pence & Marfo, 2008:80; Prochner & Kabiru, 2008:121-122; Whishard et al., 2003:96). Charlesworth et al. (1993:4) conclude that various theories of development guide different models of early education. The next section links the developments in ECE to DAP, most of which are a consolidation of theories and research supporting best practices for child development.

2.4 ORIGINS AND RATIONALE OF DAP
In this section, I explore the origins of DAP and its rationale for early childhood education, providing insight about why it has come to be incorporated into one of the most widely used documents in guiding early childhood education.

2.4.1 THE ORIGINS OF DAP

“….DAP, based on child development theory, is a real and a useful construct”
Charlesworth et al., 1993:23).

The DAP guidelines originated in the USA, from concerns by the NAEYC about an increase in focus on skills-based teaching in early childhood care centres. The increasing number of them that use academic instruction, and a need to set standards of expectations for quality early childhood provision, motivated the genesis of the principles (Bredekamp, in Charlesworth 1998; Charlesworth et al., 1993; Goldstein, 2008:254). The NAEYC first published its guidelines in 1987, proposing age and individual appropriateness of the learner as central to the learning process. This document was revised in 1997, after criticisms that it ignored the social and cultural dynamics of child development as factors that contribute to learning (Bredekamp & Copple, 1997; Charlesworth, 1998; Grisham-Brown et al., 2005:6-7; Charlesworth et al., 1993). Consequently, the 1997 DAP template included culturally appropriate practices as part of considerations for judging the appropriateness of early childhood practices (Bredekamp & Copple, 1997; Goldstein, 2008:254; NAEYC, 1997:9). Hence, there was produced the DAP document, recommended for use among American children from infancy through age eight.

2.4.2 UNPACKING DAP

As mentioned above, DAP guidelines have their origins in research (Charlesworth, 1998; Kostelnik et al., 2004; Bredekamp & Copple, 1997; NAEYC, 1997). The DAP framework is entrenched in empirical as well as theoretical foundations of child development, clustered under the ‘developmental psychology paradigm’ (Kilderry et al., 2004:26). The ideas about activity-based learning and the holistic approach to child development borrowed from constructivists such as Piaget, Vygotsky and Erikson (Charlesworth et al., 1993; Charlesworth, 1998; Kontos & Dunn, 1993; Kostelnik et al., 2004:20; Stipek, 1993). Therefore, although NAEYC developed this document for the
American context, other countries have adopted its basic principles to guide ECE provision (McMullen et al., 2005), especially because the document originated from principles of child development entrenched in theory and research publicised through textbooks and conferences. Jambunathan and Caulfield, (2006:257) conclude that the DAP document has standards that “promote opportunities for appropriate growth and development of children”.

Kontos and Dunn (1993:54-5) and Stipek (1993:32) wrote that since the DAP is based on theoretical and conceptual notions about best practices for children, such as active learning, exploration and experimentation with a responsive adult, then it provides a theoretically driven foundation for factors to be considered when planning for children’s learning. In addition, Kontos and Dunn (1993:55) note that the role of the caregiver is articulated in the DAP principles, as one who is responsive to children’s play to facilitate their learning, as well as helping to guide children’s social and emotional development. Charlesworth (1998) suggests that the DAP guidelines are universal, because they are based on developmental changes over an individual’s lifespan that are relatively similar across cultures. Although the initial focus of early childcare research seemed to focus on the developmental paradigm, the current approach appreciates the ecological setting of development (Bronfenbrenner, 2005; 1979; 1972; Bronfenbrenner & Evan, 2000; Marshall, 2004; Kilderry et al., 2004).

Three basic principles might be summarized from the DAP guidelines. First, it emphasizes a child-centred approach, which recognizes children as constructors of their knowledge, driven by their desire to explore and make sense of their world. Second, it acknowledges the children’s capabilities, learning needs, developmental level and learning style; third, DAP principles acknowledge families as partners in their children’s learning (Bredekamp & Copple, 1997; Charlesworth et al., 1993; Charlesworth, 1998; Kontos & Dunn, 1993, Kostelnik et al., 2004; Grisham-Brown et al., 2005).

Therefore, all the 12 principles are usually summarized into three pillars of DAP; principles of how children develop and learn; concern for children’s individuality, and a culturally and contextually responsive considerations during their learning. Grisham-Brown et al. (2005:21) caution that the DAP framework alone does not meet the definition of a curriculum framework, despite its significance in providing guidance to caregivers about their interaction with children and definition of age-appropriate skills.
In addition, Kostelnik et al. (2004) note that the DAP framework is only a guide, and not a set of fixed rules for educators to enforce in helping early childhood education to plan for best practices for children. Rather, teachers should use their discretion to interpret and shape children’s learning experiences, as this might relate to their early childhood training. On the other hand, Rushton and Larkin (2001:26) regret that there still exists “a discrepancy between what research recommends and how children are currently being taught”. The next section provides a brief of the rationale behind interest in early childhood education services around the world.

2.5 THE DEMAND FOR EARLY CHILDHOOD EDUCATION

“Is there any part of a person’s thought and feeling, knowledge, and ability, which does not have its deepest roots in childhood, any aspect of his future education which does not originate there?” (Froebel, in Lilley, 1967:87).

2.5.1 INTRODUCTION

This section addresses the existence of early childhood education provision and the role it plays for society in general, and for families and children in particular. Social, economical and political reasons motivate investment in ECE. This provides insight into some of the dynamics of children’s educational experiences as observed in the study, together with social factors cited by teachers as influencing their beliefs. In Africa, as in the rest of the World, there is increased concern among governments to strengthen their education systems, and to develop a prospective human resource base by strengthening early childhood and care programs (Pence & Marfo, 2008:79; Prochner & Kabiru, 2008:125; UNESCO, 2003). Action frameworks are provided for in documents such as Conventions on the rights of the child (CRC, 1990), World Summit for Children (1990), the Dakar Framework, Education for all (2000), and the Millennium Development Goals (2000) frameworks. Principles from these declarations guide governments’ policies in developing a strong human resource base (Prochner & Kabiru, 2008:125). Nevertheless, the question arises as to why there has been such an increase in apparent interest in children amongst international bodies.

The World Bank Early Childhood Development cited some benefits to be derived from investing in early childhood education, for instance improved nutrition and health, higher
intelligence, higher school enrolment, less repetition, fewer drop-outs, help for the disadvantaged and long-term cost savings to society (Penn, 2008:384). As indicated, there are social, economic and political benefits that motivate societies to invest in early childhood education (Pence & Marfo, 2008:79; Prochner & Kabiru, 2008:125; UNESCO, 2003).

In the following section, I examine some of the social economic and political dimensions, to provide a perspective of the dynamic nature of ECE perception, and use of the service, besides an appreciation of the various stockholders’ values that influence teachers’ beliefs and practices. Two perspectives guide the discussion in this section, namely first is the combined social, economic and political dynamics, and second is the academic role of early childhood development. I explore both perspectives in the following section.

2.5.2 PRESCHOOL PROVISION: THE SOCIAL, POLITICAL AND ECONOMIC DYNAMICS

Over the years, in many parts of the world, particularly in the 21st century, ECE continues to play diverse roles for both children and parents. These include providing custodial, alternative quality care for children as their mothers engage in full-time employment (American Academy of Paediatrics, 2005:187; Anme & Segal, 2004:345; Belsky, 2006:97-98; Republic of Kenya, 1998a; Morrison, 2006:216; Penn, 2000:7). In many parts of the world, interest in and growth of ECDE is influenced by as diverse factors as the economy, rural-urban migration, a growing number of roles for mothers, a rise in female-headed households, and a growing demand for formal education (McMullen et al., 2005; Morrison, 2006:216; Penn, 2000:7; Republic of Kenya, 1998a).

The ‘early intervention or ‘early start’ theory postulates that children who participate in ECDE programmes benefit in their cognitive and social development, as they also get better chances at school and even later. In particular, this ‘early start’ theory might be beneficial for children from disadvantaged backgrounds who enter school with lower foundational skills in language, reading and mathematics (Barbarin et al., cited in NAEYC, 2009:2). Although it remains controversial, investment in ECDE premised on the early intervention theory (Penn et al.; Penn & Lloyd, both in Penn, 2008:382) can ameliorate the consequences that children from disadvantaged backgrounds might suffer later in school life. Children with special needs and the girl-child might also benefit from

The promise of a better human resource base, with a better foundation laid in early childhood, might have reinforced renewed interest by American corporate organisations, such as IBM, AT&T and American Business Corporation, as ‘visible’ financiers of early childhood programmes in America (NAEYC, 2008). Corporate America has had an increasing interest in ECE:

> There is a growing concern among corporate bodies and businesses about the quality of American workforce and the use of early childhood education as promise to develop a literate workforce. Many preschool programs include work-related schedules in the program, seen as critically important in inculcating responsibility and trustworthiness, skills of which preschool education is seen to develop early in an individual’s life (Morrison, 2006:215).

Aside from linking ECDE to human resource development, in Kenya the need to invest in ECE is no less urgent. Some social factors cited for the need for preschools include the declining number of extended family links that traditionally provided childcare services (Prochner & Kabiru, 2008). This decline arose from urbanization that has created social and geographical distance among families and the need by extended family members and the community members to engage in commercial activities (Republic of Kenya & UNESCO, 2005:17). Therefore, by embracing ECDE early intervention theory, governments aim to lower problems such as truancy, drug abuse, violence and dropping out of school (Morrison, 2006:216), and to inculcate high moral standards in children (Republic of Kenya, 2006b:4). Besides the aforementioned reasons, the value of early childhood services continues to increase, not only as part of school transition, but also as an alternative childcare support (Republic of Kenya, 1998a; UNICEF, 1998; Swadener, 1995).

### 2.5.3 The Academic Role of Early Childhood Education

The perspective of the child incorporates the view of the teacher as someone who listens, guides, supports, challenges, and focuses children’s attention on learning opportunities and learning (Samuelsson, 2006:102).
The following section highlights the increasing trend to make learning in ECE formal, focusing on academic skills attainment and direct instructional models (Fromberg, 2007:467-468), also called teacher-directed, standards-based learning, direct teaching, and skills-based learning (Goldstein, 2007b; 2008). In addition to the social, economic and political reasons for increased use of ECE services already cited, early stimulation appears to have positive effects on the children’s brain development, in addition to better social and emotional functioning (Belsky, 2006:106; Fromberg, 2007:467; Goodman & Sianesi, 2005:536; National Institute of Child Health and Human Development {NICHD}, 2003:1464; Stipek et al., 1995:220). Closely linked to the cognitive benefits view is the ‘early start’ to school success belief that children enrolled in preschools are likely to succeed in school and in life, already discussed (Fromberg, 2007:467; Penn, 2008:384; Republic of Kenya, 2006b:3; Morrison, 2006:124; NAEYC, 1997; 2009). All these benefits have continued to make ECDE services attractive.

The ‘early start to life’ belief has influenced policy developments in USA, stressing on the need to break the poverty cycle through school success among children from poor backgrounds (Monighan-Nourot, 2005:23; Morrison, 2006:124). This continues to affect preschool policy and practice in the USA (Goldstein, 2008:253), and beyond (Jambunathan & Caulfield 2006; McMullen et al., 2005). In addition, another American early childhood policy with political backing, the “No Child Left Behind” legislation (NCLB, 2001), mandated state assessment by 2003, and might have influenced preschool practices, especially those relating to pedagogy and the role of assessment (Goldstein, 2008; NAEYC, 2009). In this plan, schools needed to demonstrate that children whose first language was not English had gained proficiency, and they were assessed annually for oral language, reading and writing skills in English (Warner & Sower, 2005:209). These trends are significant, because ideas travel through written documents and conferences to influence ECE around the world (McMullen et al., 2005:453). For example, the early intervention theory reflects in the policy framework on early childhood development in Kenya. One of the statements from the guideline notes:

When children with special needs and those from disadvantaged backgrounds are exposed to stimulating early childhood development experiences, their placement, retention and academic performance are enhanced. This means that they are more likely to enter[school] at the right time, and complete school successfully, get better paying jobs and therefore live higher quality lives (Republic of Kenya, 2006b:3).

Segregating domains of child development might have led to ‘academising’ (my term, already defined in the terminology section in the first voyage), or what Neuman (2005:191) calls ‘schoolification’. For example, the early childhood standards’ guidelines 19 for preschool education in Kenya, acknowledge the ‘cognitive emphasis’ trend, as it warns that ‘primary 1 and 11 syllabuses shall not be used in ECD centres in the country’ (Republic of Kenya, 2006a:14). Where social values do not reflect a holistic approach to child development, emphasis might negate the principles of child-centred activities through play and intentional activities that focus on the whole child (Kostelnik et al., 2004:41-2, 46; Samuelsson & Johansson, 2006; Montessori, 1920; Froebel, 1899).

From these reviews, there seems to be a prominent cognitive demand by stakeholders in ECD to prepare children for school transition, other than child-care provision. Therefore, the result might be a global trend towards development of children that emphasizes the teaching of academic skills, using didactic methods that “drill and kill”, at the expense of holistic child development, that include other domains such as social and emotional development (Stipek, 2007:741). Stipek (2007:743) observes that “ironically to achieve high academic standards, we need to be more, not less, concerned about the non-academic aspects of child development”.

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19 This is the document developed to guide ECE provision in Kenya.
As part of focusing on the ‘whole child philosophy’, early childhood provision prepares children for school transition, as well as providing government with an incentive to focus on health, and social and economic services for families (Morrison, 2006:216). These appear to be the motivation for ECE services for many families, government and organisations interested in the welfare of children.

2.5.4 A SUMMARY ON THE INTEREST IN EARLY CHILDHOOD EDUCATION

The global trend indicates a rise in the use of early childhood education-triggered social, political and economic factors. The social, economic and political, plus equity concerns, affect the development, provision and focus of a preschool curriculum. These various motivations, which also involve stakeholder values, vary by context and focus. Some of these benefits motivate the development of preschool education in Kenya. However, preschool services, which tend to emphasize formal learning, are more prevalent in towns than in rural areas, where some children do not even attend preschool prior to joining primary school (Republic of Kenya & UNESCO, 2005:33). Regardless, children within the age range of three-to-five benefit through ECD services (about 35% according to MOEST statistics, quoted in Republic of Kenya and UNESCO, 2005:12, and continuing to increase). In the following section, I review ECE in Kenya so as to provide a perspective on the factors that influence provision and insight into data interpretation and discussion which follow in subsequent voyages.

2.6 PRESCHOOL EDUCATION PROVISION IN KENYA

At independence, the Government of Kenya recognized that education was the basic tool for human resources development, improving the quality of life and cultivating nationalistic values (Republic of Kenya, Vision 2030).

2.6.1 A BRIEF HISTORY OF PRESCHOOL EDUCATION IN KENYA

The historical developmental of ECE in Kenya dates back to the 1940s, during pre-independence days, when the British colonialists established day care centres to provide education for European and Asian settlers’ children. During the same period, the colonial government established schools to cater for the needs of Kenyan labourers’ children living on tea, coffee and sugar plantations (Adams & Swadener, 2000:388;

In 1954, UNICEF initiated a partnership to support ECE in Kenya, with the objective of supporting the health needs of mother and child (UNICEF in Mbugua, 2004:193). Soon after independence in 1964, the Ominde Commission of 1964 proposed a link between early childhood and primary education as part of preparatory stage for primary education, (Mbugua, 2004:193). Consequently, guided by the ‘Harambee’ philosophy (translated from Kiswahili as *lets pull together*), preschool education has continued to expand through community partnerships and mobilisation of resources (Adams & Swadener, 2000; Biersteker et al., 2008:232; Prochner & Kabiru, 2008:127; Swadener et al., 2008:411).

The impetus for these partnerships increased in the 1970s, when the government entered into partnerships with non-governmental organisations (NGOs), parastatal bodies, religious organisations, the Bernard Van Leer Foundation, the Aga Khan Foundation and UNICEF (Mbugua, 2004:194). Significantly, emerging from these partnerships, especially between the Multi-National Bernard Van Leer Foundation and the Kenya government, was a 10-year preschool education project initiated in 1972, and the establishment of National Centre for Early childhood Education (NACECE) in 1974 (Republic of Kenya & UNICEF, 2005:17; Mbugua, 2004:195). This marked the genesis of a coordinated ECE program throughout the country (Adams & Swadener, 2000).

Such partnerships have played a significant role in the development and expansion of ECD in Kenya. An examination of its objectives indicates it derives noticeably from the principles of child development and in turn a DAP framework (Bredekamp & Copple, 1997; NACECE, 1999:V; Republic of Kenya, 2006a:2-3; 14-5; Swadener et al., 2008:414).

### 2.6.2 Kenya: Policies on Early Childhood Education and Development

“The vision for the education sector for 2030 is to, “have globally competitive quality education, training and research for sustainable development” (Republic of Kenya, 2007:97)
Kenya has many policy documents that mention the role of ECDE in the overall framework for meeting its education objectives. These include *Kenya Vision 2030*, which has a framework that links education goals to other sectors of life, and aims to “increase GER ECDE by 50 per cent”, besides incorporating ECE into primary school learning, as a means to “strengthen early childhood education and thereby lay a solid foundation for the country’s overall education and training” (Republic of Kenya, 2007:101).

According to the Kenyan "*Master Plan on Education and Training for the period 1997-2010*”, in Kenya as in the rest of the world, ECDE is an area that requires re-emphasis, particularly because of the factors that have necessitated the development of ECD centres. The economy, rural-urban migration, growing multiple roles for mothers, rise in female-headed households, and the demand for formal education continue to influence growth of ECDs (McMullen *et al.*, 2005; Morrison, 2006:216; Penn, 2000:7; Republic of Kenya, 1998). Kenya has also continued to participate, and to sign internationally driven frameworks mentioned earlier to ensure that children remain part of the national and international agenda. Kenya is signatory to the 1989 United Nations CRC. According to this convention, every child has a right to access education, with Article 28 declaring that, “all children have a right to free education and should be protected from neglect, cruelty and exploitation” (CRC, 1990:8). In addition to embracing such a commitment, the Kenyan Government also signed the 1990 African Charter on the Rights and Welfare of the Child, and the 2000 Millennium Development Goals (MDGs). In addition, Kenya endorsed the 1990 Jomtien World declaration on Education For All (EFA), followed by the 2000 Dakar World Education Forum, both of which recognize ECD as a holistic approach to child development.

has a plan to integrate ECDE into primary schools by 2010 (Kenya in Biersteker et al., 2008:232; Republic of Kenya, 2007:101).

However, despite this strong policy commitment, and a remarkable increase in expansion of ECDE in Kenya since independence, the government has not translated these into practice, in terms of prioritizing and financing ECDE services as part of the commitment to improve children’s access to education. Preschool education attendance in some parts of the country remains optional (Biersteker et al., 2008:232; Republic of Kenya, 2006b:16). This has resulted in a “no access policy”, and since most of the financing of preschool relies on parents, local communities, NGOs and private individuals (Republic of Kenya & UNESCO, 2005:27), it limits government control over compulsory school attendance. This lack of direct financial support and commitment to ECDE emerged during the implementation of the FPE that excluded ECDE from benefiting from this significant government initiative (Republic of Kenya & UNESCO, 2005:13; Mwaura et al., 2008:238). Summarizing the absence of government financing of ECDE, Republic of Kenya and UNESCO note:

…in general, the government has been spending very little on ECDE. Costs for ECDE in Kenya are generally borne by parents …[but] the government has been subsidizing the training of preschool teachers through the world Bank funded Kenya ECDE project of 1997-2004 …ECDE in Kenya receives minimal government investment compared with other sub-sectors (2005:16).

The absence of direct government funding at the ECD level might have implications for the implementation of the preschool curriculum. The following section provides an outline of some of the challenges facing ECD in Kenya, providing insight into the data interpretation and the conclusions made. These include supervision and administration of curriculum, and the multi-sectoral partnerships that support ECD programs.

2.6.3 SOME CHALLENGES FACING THE PROVISION OF ECD IN KENYA

The Republic of Kenya (2005:xv) has identified four challenges that need re-emphasis in ECDE, namely a comprehensive policy framework, enhanced access, adequate financing and training of teachers. The following section is a preview of some of these challenges facing ECE provision in Kenya. These are administration and supervision, and the challenges that arise from the multi-sectoral provision. Insight into these challenges
provides a better understanding of the observed practices and emerging teachers’ beliefs, as well as a framework to link the data to a bioecological systems theory.

2.6.3.1 Access, policy implementation and supervision of ECD

There are 17,000 public primary schools in the country, with 70 per cent of these having a preschool attached to them. In 2003, there were 28,000 ECD centres, 74 per cent of them linked to a primary school, with an enrolment of 1,528,596 children (Kenya in Biersteker et al., 2008:232). The remainder of the preschools operate on private property or in private schools, churches or municipality centres unattached to a primary school. However, one of the Education Sector Strategic Plan (ESSP) objectives of the Kenyan government, yet to be realized, was to integrate preschool education into mainstream basic education programmes by the year 2007 (Republic of Kenya & UNESCO, 2005:20; Republic of Kenya, 2007:101). Such integration might have reduced competition for standard one places, and hence reduce the need for a transition interview.

Currently, there is a tendency for preschool children in some communities to outnumber the primary school vacancies available for them, due to inequitable distribution of resources (Republic of Kenya, 2006b:6; Republic of Kenya & UNESCO, 2005:42). This poses a challenge to the number of children admitted, and the content required for school transition. In most instances, where there is no preschool attached to them, primary schools use interviews to select the children for entry, especially in urban areas (Biersteker et al., 2008:233; Republic of Kenya & UNESCO, 2005:33). For competitive advantage to offer so-called ‘quality education’, some schools might use interviews to select only what they refer to as ‘the best’ preschoolers to enrol in their schools. Therefore, a ‘perceived good schools’ syndrome emerges, in which parents prefer particular schools (Mwaura et al., 2008:238), and this becomes linked to competition and access to ‘good’ public resources, leaving inadequate resources for quality learning at the currently ‘crowded primary schools’ (Republic of Kenya, 2007:99-100).

Although the Ministry of Education has an explicit guideline on the standards required for school transition from the preschool to the primary school (Republic of Kenya, 2006a), most preschools appear independent in deciding what and how to teach children (Republic of Kenya & UNESCO, 2005:33). Academically focused assessment continues to benchmark admission to primary schools (Biersteker et al., 2008:234; Republic of
Kenya & UNESCO, 2005:33), which might suggest that adherence to the standards guidance for ECD practices that de-emphasize reading, writing and arithmetic, might have been compromised (Republic of Kenya & UNESCO, 2005:33; Republic of Kenya, 2006a).

The Ministry of education, together with NACECE, recommends a child-centred approach, but this might not reflect the practice in primary schools. The pedagogic strategies at the primary school are teacher-directed, creating a disjuncture between preschool and primary school curriculum which does not embrace a child-centred curriculum (Biersteker et al., 2008:234), and yet supervision is limited due to the heavy workload of supervisors in the field, and irrelevant guidelines provided by the ECD section at the inspectorate (Republic of Kenya & UNESCO, 2005:33-4). Therefore, despite emphasis on a child-centred approach to preschool learning, lack of supervision, and ambiguous guidelines for inspection might compromise effective implementation of the preschool services (Kenya, 2006b:6).

2.6.3.2 The multi-sectoral provision of ECD

As mentioned above, the Kenyan government is seen as strong on policy and short on the direct provision of ECD. Despite any strength of policy, ECE is one area that the Kenyan government, for some time now, has not directly provided (Biersteker et al., 2008:233). Republic of Kenya and UNESCO (2005:41) regret that “the government does not see ECD as a priority … [and] therefore [it] receives little public investment”. Instead, it encourages partnerships with other organizations, especially concerning the training of preschool teachers and provision of learning facilities (Republic of Kenya, 2006b:12; Republic of Kenya & UNESCO, 2005:27). Private organisations, local authorities and parents provide ECE for their children or workers, but under the co-ordination of NACECE. At a government level, the provision of other adjunct services such as healthcare, nutrition and health monitoring, incorporate the Ministry of Health. Other partners include municipalities and city councils and the local communities (Adams & Swadener, 2000; Biersteker et al., 2008:233).

The multi-sectoral approach to provision and support of ECD might have its own advantages and disadvantages. It is advantageous because it opens up the development of ECD programmes to partners who include parents, multinational donors, community
partnerships, and various government Ministries (Republic of Kenya & UNESCO, 2005:44). Although such partnerships are important for increasing access to preschool, it introduces divergent and sometimes conflicting expectations for the preschool teacher (Adams & Swadener, 2000), since the multi-sectoral approach empowers many partners that might not clearly stipulate roles, values, and goals (Republic of Kenya & UNESCO, 2005:48). Katz (1995; 1993) advances five perspectives of quality that might differ among stakeholders. Such perspectives might be important for teachers’ implementation of the curriculum.

2.6.3.3 Concluding remarks

The history of preschool education in Kenya dates back to pre-independence days, when their role was custodial. The number of preschools has also continued to increase the diversity of roles, with preparation for school transition being prominent. Through the years, preschools have developed from community initiatives, through the above-mentioned ‘harambee’ spirit as communities have come together to pool resources for infrastructure development. Although the government does not directly fund preschool, but rather invites parents to contribute, it has embraced a partnership policy that involves both local and international partners in developing and supporting ECDE. As partners, parents employ teachers because the government does not have an employment policy for preschool teachers. It is against such a background of dynamic child development, that this study is conceptualized and planned. In the following section, I review some empirical studies that provide insight into the current study.

2.7 STUDIES ON PRESCHOOL INTERACTIONS, TEACHERS’ BELIEFS AND DAP

“To know the road ahead, ask those coming back” (Chinese proverb).

2.7.1 A GENERAL INTRODUCTION

This section explores the empirical studies related to preschool interactions and DAP principles, and teachers’ beliefs to provide insight into the topic. Broad areas covered include teachers’ beliefs and classroom practices, beliefs and education level, beliefs and
Voyage 2: Linking with other voyagers in a similar direction

cultural variation and beliefs and grade level variation. Figure 4 (below) summarizes this section.

**FIGURE 4:** Summary of the review of empirical studies

### 2.7.2 STUDIES ON DEVELOPMENTALLY APPROPRIATE PRACTICES

This section is a review of empirical studies related to DAP or aspects of the use of developmentally appropriate practices. In addition, it explores some studies related to child-centred approaches as closely aligned to DAP. This might provide insight into my secondary focus on preschool children’s educational experiences explored in my study. Although this might not be an exhaustive review of DAP belief and practices and studies that relate to it, it does provide insight on research about DAP. Therefore, the literature review focuses on the latest studies, such as those of Wang *et al.*, (2008), Goldstein (2007a, b), Jambunathan and Caulfield (2006), Lee (2006), Parker and Neuharth-Pritchett (2006), McMullen *et al.*, (2005), Li (2003), McMullen and Alat (2002), Cassidy and Lawrence (2000), and McMullen (1999), among others. In addition, the progenic studies that foreground research into teachers’ beliefs and practices framed from a DAP perspective are included, for instance Charlesworth *et al.*, (1993), Kontos and Dunn (1993), Stipek (1993), Stipek and Byler (1997), and Charlesworth (1998).

Goldstein (2007b) examined the way two-kindergarten teachers’ balanced holistic approaches to child development with standards requirements for testing. Using participant observations and interviews, Goldstein (2007b) explored which priorities
these teachers chose, finding that they held strong beliefs that supported a holistic approach to child development, despite being aware that the changing expectations for kindergarten introduced some complexity into their practices (Goldstein, 2007b:387). For example, teachers in Goldstein’s study felt that some children, who might not have been ready, could have been under pressure to cope with the demands for learning to read and do simple mathematics. In addition, the teachers felt time constraints on managing the kindergarten routine, with more work for children to do and a faster tempo to complete schedules. The teachers used three strategies to accommodate both academic skills and holistic child development, namely integration, demarcation and acquiescence. Integration followed an embedded approach, with both skills and meaningful, child-directed and play-based activities existing simultaneously (Goldstein, 2007b:389). Demarcation involves planning separate schedules for children to engage with skills-based academic content, while at other times they play (Goldstein, 2007b:390). Acquiescence involves focusing on academic content, which parents might want to see, but only using selected materials that are beneficial to children, to retain DAP framework (Goldstein, 2007b:390).

Goldstein’s study provides insight into the strategies teachers can use even as they struggle to create a compromise. It indicates that parents and state testing in the USA are some of the sources of tension for teachers who want to embrace DAP. However, Goldstein was researching two teachers in one school, and it is possible they shared some expectations from the same group of parents. In addition, Goldstein focused observations on teachers’ of kindergarten children. My study differs from this because I used videotape20 and photographs during observation, of four-year-olds and five-year-olds, and in two separate preschool settings, practising two different curricula. Whereas Goldstein (2007a; b) observed white females, all four of the teachers I observed were black females. Because of social determinants, parents’ expectations might vary by community. For instance, teachers working in one setting might share similar expectations, or even teaching approaches. The age of the children, as well as the level of teachers’ education and experience, all differ from those of my participants, and so might reasonably be expected to produce different results.

20 See chapter three for details of how I used visual elicitation to access teachers’ beliefs during teachers’ interviews.
The conclusion by Goldstein (2007b) that teachers used one of three approaches, which can accommodate both DAP and standards skills requirements, seems to reflect the findings by Kim et al. (2005:51). The latter explored kindergarten and childcare centre teachers’ perceptions and use of DAP practices, in a quantitative study of 211 kindergarten teachers and 208 childcare centre teachers in Korea. Kindergarten teachers had either a college degree or certification through child development training (Kim et al., 2005:51). They found that early childhood teachers’ self-reported beliefs were developmentally appropriate and reported utilising DAP, although their self-reported DAP activities had a low score (Kim et al., 2005:54). The researchers concluded that the childcare workers tended to reflect both DAP and DIP, (defined in the first voyage) activities, showing that in any class there might be a blend of both practices used. This reflects on the conclusions by other scholars that rather than view DAP as an either/or practice, it is possible to view it within a continuum (Charlesworth et al., 1993; Kontos & Dunn, 1993, Kostelnik et al., 2004:33-39; Parker & Neuharth, 2006). Overall, beliefs in the Kim et al. study of DAP tended to score higher than the actual practice. However, its applicability to my study is treated with caution since the study utilised self-reported beliefs in a quantified approach, and these might be inherently subjective.

However, the findings of Kim et al. (2005) may be useful to my study in other ways, because they do show various perspectives held by different groups in relation to the use of DAP, as well as indicating that beliefs tend to be higher than practice, even in studies that do not make actual observations. It also highlights some constraints that teachers and caregivers face in implementing the DAP curriculum, such as lack of autonomy to develop curriculum and to select instructional strategies to use in the classroom; influences from the national curriculum; their centres’ philosophy; parents’ needs; and the policies of the local districts (Kim et al., 2005:55). Their study also reflects earlier conclusions in the study of Charlesworth et al. (1993), that teachers using DAP felt that they had more control over planning and implementing instructional activities than did teachers using less appropriate strategies.

Charlesworth et al. (1993) sought to identify DAP and DIP beliefs of principles and kindergarten teachers in relation to their classroom practices in the USA, using a questionnaire and a Likert scale. The findings indicated congruence between beliefs and practices, although the belief on DAP was stronger than practice. Overall, the more
DAP-oriented the teachers, the more they were likely to provide DAP-related activities. Beliefs about DIP reflected an even stronger predisposition to provide DIP-related activities. Therefore, it appears from this study that individuals act according to their beliefs. The researchers noted that DAP-oriented teachers felt they had more control to plan and to implement instructional activities than did teachers using less appropriate strategies. They also report that children attending DIP classrooms experienced more stress than did their DAP counterparts. In DAP classrooms, Charlesworth et al. (1993) observed centre-based, group activity, whole group activity and music activities, while in the DIP-related classes, teacher-directed small groups, workbooks and worksheets, waiting, punishment and transitions, prevailed. Testing appeared to stress children, and in a follow-up study among children in the primary grades, those who attended the DAP kindergartens exhibited less negative behaviour and better work-study habits than did the DIP kindergarten children (Charlesworth, et al., 1993:18-19)

Whilst Charlesworth et al. (1993:23) concluded that DAP is a highly contentious framework, ECE practitioners can use it to define, plan classroom activities, in addition to using it to assess programmes. They also cautioned that DAP implementation needs to be flexible if it is to reflect teacher style, and the children’s learning styles and cultures (Charlesworth, et al., 1993:23). This is in agreement with later scholars, who advocated sensitivity to individual differences (Kostelnik et al., 2004; Jalongo et al., 2004; Jalongo, 2007; Jambunathan & Caulfield, 2006; Stipek, 2007). An important caveat is that this research was conceptualised when the relationship between DAP and DIP was still being conceptualised separately as either DAP or DIP, as opposed to the current trend of embracing continuity between the two approaches (Charlesworth et al., 1993; Goldstein, 2008; Kontos & Dunn, 1993; Kostelnik et al., 2004). Some studies now identify benefits such as letter recognition and reading achievement of didactic instruction for children from disadvantaged backgrounds (Stipek, 2004; Stipek et al., 1995), and children learn some skills, such as how to follow directions, through the telling approach that combines with modelling (Kostelnik et al., 2004:79; Stipek, 2007).

It appears, however, that some teachers prefer teacher-directed approaches. For example, Zeng and Zeng (2005:710) conducted a study to establish the trend of developmentally and culturally inappropriate programmes in the USA, from a probability sample of 3,047 kindergarten teachers and 866 administrators. They surveyed teachers’ self-reported
beliefs and practices, teacher qualification and administrator qualification. Apart from assessing teacher qualifications, teaching experiences and educational background, they also assessed teacher belief variables, such as in-class activities, evaluation methods, classroom organisation and views on kindergarten readiness. Administrator qualifications included teaching experiences, educational background and their specialized training and certifications. It was found that they valued teacher-directed activities such as formal reading and maths instruction, ability to follow instructions, attentiveness in class and minimal disruption. Teachers also felt that national standards should apply to children’s assessment, with more emphasis on English proficiency as part of school readiness. However, some teachers felt that pressure from parents constrained their freedom to implement the curriculum (Zeng & Zeng, 2005:716).

Although their study may be relevant to mine, in so far as it identified some sources of pressure that inhibit teacher freedom to implement a child-centred curriculum, since Zeng and Zeng (2005) captured self-reported beliefs in a quantitative approach, it is prone to participant bias. This is a shortcoming because a questionnaire used to capture beliefs does not facilitate probing for deeper understanding. The current study seeks to overcome, through observations and visual-elicited interviews, the weaknesses associated with quantitative approaches that assess beliefs. Zeng and Zeng (2005) concluded that developmentally inappropriate practices were prevalent in the kindergartens they studied in the USA. Jambunathan and Caulfield (2006) made a similar observation about the prevalence of inappropriate practices in an Indian study.

After assessing twenty-one early childhood classrooms, Jambunathan and Caulfield (2006) concluded that kindergartens teachers did not apply DAP in their study context in India, perhaps as a reflection of the Indian values that emphasize didactic teaching over creativity and independent thinking (2006:255). Using a Likert scale, they explored four categories of DAP: creating a caring community of learners; teaching to enhance development and learning; constructing appropriate curriculum; assessing children’s learning and development, and having reciprocal relationships between families and their children. The study observed diverse classrooms with lower kindergartens attended by three-year-old children, and upper kindergarten with four-year-olds, located in diverse settings, such as elementary school and secondary school. Each class observed had between 21 and 25 children, with a full-time teacher and an aide. All the teachers had
bachelor’s degrees, while the teacher aides had no degrees. Some of the DIP practices they noted were fewer opportunities for children to interact with materials or with paper and pencil, as well as content-based assessments that did not consider each child’s individual abilities (Jambunathan & Caulfield, 2006:255). In the study context, the state organization and central organization that sets the curriculum seemed to have more authority over the curriculum than did the teachers.

The relevance of Jambunathan and Caulfield’s study (2006) is that it provides insight into the extent of DAP use in an Indian context (that of a developing country, similar to Kenya), particularly the sensitivity of DAP to cultural values and the role of central authority in the teachers’ use of DAP. Nevertheless, Jambunathan and Caulfield (2006) studied teachers qualified with bachelor’s degrees, assisted by teacher aides as they interacted with children between ages three and four. It differs from the current study, in which teachers had certificate qualifications in early childhood education, were interacting with three-, four- and five-year-old children without teachers’ aides. Previous research has demonstrated that the qualification held by teachers affects their beliefs about DAP and the way they interact with children (McMullen & Alat, 2002; McMullen, 1999; Wang et al., 2008:245). Moreover, the attachment of the Kindergartens to the elementary schools and secondary schools might have influenced the kindergarten teachers in their interaction with the children. Overall, the use of a Likert scale by Jambunathan and Caulfield (2006), to assess DAP use in the Indian classrooms, has limitations because it does not access the reasons for the decisions taken by the teachers to use the approaches observed. The current study improves on this methodological limitation by including visually elicited interviews to supplement observed practices for more insight. Jambunathan and Caulfield (2006) concluded that context expectations and values, such as the valuing of community over individualism, might vary the approach used by the teachers and highlight cultural variation inherent in the use of DAP.

Emerging from this review is that there are both similarities and differences between countries in teachers’ self-reported beliefs and their self-reported DAP practices. McMullen et al. (2005) have noted this variation following exploration of the commonalities held by caregivers and teachers of three- to five-year-old children in the USA, China, Taiwan, Korea and Turkey. The studies concerned self-reported beliefs and self reported practices related to the NAEYC’s policy statement for developmentally
appropriate practices. They used a survey to collect data in each of these countries, using a number of different sampling methods. Quantitative results showed similarities related to beliefs and practices associated with integrating across the curriculum, supporting social and emotional development, providing opportunities for interaction with materials and flexibility of choice in the curriculum. Further, self-reported beliefs associated with DAP were positively correlated to self-reported frequency of engagement in preschool activities related to the philosophy in all the five countries, but strongest in the USA and weakest in China. McMullen et al.’s (2005) study adds value to the relationship between teachers’ beliefs and their self-reported practices across contexts, and it highlights possible disparities between the beliefs and practices of teachers based on their being in different countries. However, a qualitative approach, as applied in the current study, using actual classroom observation, might yield different results as compared to the limitations associated with self-reported questionnaires, open as they are to reporter bias (Stipek, 2004:561; Vartuli, 1999:507, Zeng & Zeng, 2005:718).

The study of McMullen et al. (2005) also reflects on how teachers’ beliefs might vary by context, depending on the cultural expectations. This conclusion is similar to that of Wang et al. (2008), who explored the consistency of Chinese preschool teachers’ beliefs, and compared them with their American counterparts. In addition, they looked into the role of personal, professional and socio-cultural characteristics in the teachers’ curricula beliefs. Participating were 296 Chinese teachers and 146 American teachers, who completed the Teacher Beliefs Scale in addition to supplying their background information. Besides interviews, Chinese teachers supplied information on their instructional activities using the instructional activities scale. From each sample, 10 teachers participated in an in-depth interview. The findings indicated moderate and consistent links between preschool teachers’ beliefs and self-reported practices (Wang et al., 2008:243). Teachers in both contexts held similar conceptions about early teaching concerning child-initiated curriculum, teacher-directed instruction of academic skills and integrated curriculum. However, the teachers in each context seemed to differ in the extent to which they endorsed particular beliefs. For example, Chinese teachers were likely to endorse teacher-directed, academic skills-oriented beliefs, in contrast to their American counterparts, whose beliefs were less formal, less structured and more child-initiated oriented (Wang et al., 2008:245). In addition, contextual factors in China, such as location of school, whether rural or urban, and class size, seemed to affect teachers’
The researchers concluded that Chinese urban teachers who appeared to endorse child-initiated learning had more access to Western influences than did their rural counterparts. Such varied exposure might also have influenced their beliefs. In addition, teachers with high levels of education appeared to endorse child-centred beliefs more than teacher-directed practices (Wang et al., 2008:245), reflecting conclusions by other scholars that education influences teachers’ beliefs (McMullen & Alat, 2002; McMullen, 1999).

Wang et al. (2008) study adds to knowledge on cross-cultural differences among teachers’ beliefs about early childhood curriculum. In addition, it provides information about factors that are likely to influence teachers’ beliefs such as the location of school, level of teacher education, among other contextual variables that might affect teachers’ beliefs. However, since this study focused on early childhood curriculum, it does not delve into the nature of children’s educational experiences, as premised on the current study. Moreover, the use of a self-reported teacher instructional scale to capture teacher practices might not reflect actual practices as might be observed in an actual classroom interaction process. As there were contextual differences among Chinese and American teachers in their beliefs, the present study might also yield differences in beliefs, because ‘teachers’ beliefs are situationally related’ (Wang et al., 2008:244).

The highest level of education and the self-reported DAP beliefs of early caregivers according are related, according to a study by McMullen and Alat (2002). Their quantitative study examined 151 early childhood caregivers and teachers enrolled from a variety of early childhood settings which included family care homes, childcare centres, headstart centres, registered ministries connected with churches, synagogues, elementary school programs and Montessori preschool programs. This study contributes to our understanding of the contribution of level of teacher education to their self-reported DAP beliefs (McMullen & Alat, 2002; Wang et al., 2008:245; Wilcox-Herzog, 2002). However, the issue of DAP might be more complex, with context-related variations and expectations for children (Klein & Chen, 2001:31; Koops, 2004:13; Nutbrown, 2006:25; Penn, 2000:9; Penn, in Robinson & Diaz, 2006:59; Warner & Sower, 2005:24). Besides, this study included a variety of contexts, besides centre-based care. The dynamics related to contexts might influence teachers’ beliefs. It might also be reasonable to assume that the teachers’ level of education might predispose them to respond in a certain way
(Wilcox-Herzog & Ward, 2004; Wilcox-Herzog, 2002:84), besides a possibility of engaging in response-set. As mentioned earlier, the limitations inherent in the exclusive use of a self-reported Likert scale (Stipek, 2004:561; Vartuli, 1999:507; Zeng & Zeng, 2005:718), is prone to participant bias.

Stipek (1993) reviewed studies on the effects of different early childhood curriculum approaches on children’s achievement and motivation, noting that child-centred preschools aligned closely to recommendations for DAP, while those regarded as didactic emphasized academic skills, reflecting similar observations by Charlesworth et al. (1993). Although direct instruction might accelerate children’s acquisition of reading related skills, but not for mathematical skills, the tasks children engaged in did not seem connected to their personal meaningful experiences, as they spent more time reciting the alphabet, counting and copying letters (Stipek, 1993:37). Stipek (1993) concluded that both of these approaches had positive effects on children. The didactic approach seemed useful in teaching children reading, letter and word recognition skills, while the child-centred approach was superior in math skills. Their results showed that academics skills oriented preschools were associated with negative social climate, an observation confirmed in a later study by Miles and Stipek (2006) that positive social skills had a positive relationship with literacy skills at kindergarten and at first grade. However, children in child-centred classes were less associated with negative behaviour (Stipek, 1993:48), perhaps because teachers in child-centred classrooms might embrace sensitivity to learner needs, with more interest in the learner, their working style and sensitivity to the context. This contrasts with teacher-directed methods that might focus to meet certain standards (Brown, 2003:50), or taking the ‘factory approach’ designed to ‘optimize efficiency through regimented processes’ (Thompson, in Brown, 2003:51). Besides, teachers in learner centred classrooms might focus on nurturing the children’s emotions as Kontos and Dunn (1993) report in their study.

Kontos and Dunn (1993) report their findings of caregiver practices and beliefs in childcare that had varying levels of DAP. In a quantitative study in one of the USA states, they found that caregiver’s beliefs and practices appeared to be inconsistent. Besides, caregivers appeared more concerned with guidance of children’s behaviour than facilitating their play. This study focused on 30 daycare classrooms, with an adult-child-ratio was 1:12. The head from each classroom, qualified with a college level childcare education participated (Kontos & Dunn, 1993:58). The findings of this study revealed
that programs can fit into a continuum DAP, ranging from teacher-directed, child-centred or a mix of both (Kontos & Dunn, 1993:71) in reflecting a similar finding by Stipek (in Stipek, 1997). Quoting the Citadel, Henson (2003:6) offers some of the characteristics that distinguish learner-centred considerations; learner characteristics inherent in their history, culture, interests and beliefs, the individuality of learners, learning as a process with relevance and value to the learner, environments with positive interpersonal relationships, and learning that occurs as a natural process that reinforces learner interest in their experiences. Although Henson’s (2003) analysis focuses on higher levels of learning, it might appear that these characteristics equally apply to early childhood classrooms.

Kontos and Dunn (1993) highlight the various levels of play and the roles that caregivers engage with during both play and teacher directed activities. From this study, we learn that classrooms fall in a continuum of DAP, rather than focusing on presence or absence of DAP. However, this quantitative study focused on caregiver interaction styles rather than educational experiences that my study endeavours. In addition, the study does not describe the age of the children, apart from the fact that they were in preschool, which makes it difficult to infer how the age of the children might have influenced educators interaction styles. In conclusion, even when teachers understand the significance of play in early childhood they may not understand how to behave during children’s free play (Kontos & Dunn, 1993:71). This study might suggest that the presence of knowledge about childcare may not always translate to effective interaction skills.

In a study similar to mine, Phillips (2004) reports the results of the beliefs and practices among five Caucasian female kindergarten teachers teaching in a rural school district in the United States. From this study, I gleaned the possible levels of analysis of practices such as type of assessment approach used by the teacher and the teaching strategy. Besides, the study also observes that parents and other teachers affect the teaching approach used by these teachers.

However, the focus of Phillips (2004) study explored, using non-participant observations and interviews, beliefs of early childhood educators about the role of kindergarten, how teachers’ viewed DAP, beliefs about how children develop and learn, instructional practices used, and the elements that influence teachers’ program designs. All the teachers in the study but one, in Phillips (2004) study had at least a Masters degree in
reading, general education, curriculum and supervision, all working in a single public school. In addition, three of these teachers had previous experience as first or second grade teachers, which might have influenced both their beliefs and teaching experiences, besides working in environment endowed with learning materials (as reflected by the description of the research context). Preschools in affluent societies have better resources and more equipped as compared to those in developing countries (Smidt, 2007:63).

In contrast, my study focused on teachers’ beliefs about developmentally appropriate educational practices, based on children’s experiences and using five constructs that also reflect my analysis approach. In addition, my study is of four teachers working in two different settings, with certificate qualifications in early childhood education. As mentioned above, other studies have connected educators’ qualifications and their practices (McMullen & Alat, 2002; McMullen, 1999). Wang et al. (2008) also suggest that the location of a school, whether rural or urban, might influence the dynamics of DAP implementation.

Even if the DAP connects to child-centeredness, its interpretation might not reflect a similar approach across contexts, as the following sentiments confirm:

…as a teacher educator and researcher, there were opportunities to visit schools in England, Scotland, France, Holland, Germany and North and it was intriguing to note that despite significant variations in context, staffing and resources provision, the ‘term child-centred’ was applied in all these situations. Perplexed by this conundrum, my musings entertained the notion that child-centred teaching had many forms of which were constructed chameleon-like in a variety of setting (Sugrue, 1997:32).

Sugrue’s (1997) observation is a diverse interpretation of child-centred teaching (read DAP), which might take different forms in different settings, depending on context variables, such as child-adult ratio. Meanwhile, Phillips’ study (2004) indicates that since the educators had volunteers working in the school, plus the high quality-learning environment (as reflected by the play materials), the level of interaction and use of the learning the environment might vary. In the following section, I review studies related to teachers’ beliefs and classroom interactions.

2.7.3 EARLY EDUCATORS’ BELIEFS AND THEIR CLASSROOM PRACTICES
Research has documented a broad range of teachers’ beliefs and their practices. These include beliefs and education level (McMullen & Alat, 2002; McMullen, 1999), beliefs and child-centred approaches (Lee, 2006; Stipek, 1993; Winsler & Carlton, 2003) and the consistency of beliefs and practices (Wang et al., 2008). In addition, studies exist that document beliefs and practices across five countries (McMullen et al., 2005), factors shaping beliefs and practices (Parker & Neuharth-Pritchett, 2006), beliefs about top-down curriculum implementation (Wong, 2003), and how beliefs and practices vary across grade (Stipek & Byler, 1997). These are some of the studies reviewed in the following section.

Li (2003) investigated the perceptions of teaching and learning held by nine kindergarten teachers in Hong Kong, using a one-hour tape-recorded, unstructured interview, later analysed qualitatively. These teachers, drawn from three schools in diverse backgrounds and locations had experience ranging from nine months to eight years. This study revealed a contrasting image of the role of a teacher espoused in the philosophy of early childhood, based on the DAP framework. Teachers in Li’s (2003) study emphasized order and schedules in the delivery of teaching, focusing on instruction, planning, preparation and external judgment as measures of good teaching. They assessed their own success rather than those of their learners (Li, 2003:20). Teachers valued children’s assignments related to cognitive outcomes, over their social, moral, aesthetic, physical development, and children’s enjoyment of the day. These Chinese teachers ignored opportunities for children to engage with self-talk as part of free play, which implies that teachers did not consider it a priority in their teaching. Moreover, teachers’ years of teaching experience did not seem to vary their definition of good teaching, contradicting the findings of Vartuli (1999). Li (2003) concludes that, due to teachers’ perceived time constraints, they focused on completing the scheduled activities more than they did on the pedagogic process. Kindergarten teachers’ images of a good teacher emphasizes the important areas that concern them, and which they might reinforce (Li, 2003). However, it is difficult to interpret these results any more clearly, because little information is available about the children with whom the teachers interacted. Given this limitation, it might not be possible to identify a range of other possible preschool activities that sometimes could vary with age, hence influencing teacher judgment of what is ‘good’. For example, Stipek and Byler (1997) demonstrate teachers’ judgement and their beliefs might vary by grade level.
In their study in the USA, Stipek and Byler (1997:310) compared 60 preschool kindergarten and first grade teachers, for a range of factors that might influence their beliefs on how preschoolers, kindergarten and first graders learn. They also explored these teachers’ interpretations of policies related to school entry, testing, and retention, as well as their satisfaction with expected practices, pressures for change, and their experiences. Schools with diverse resources and social backgrounds participated in the study. An observation scale assessing the actual classroom interaction and a Likert scale measured teacher’s beliefs (Stipek & Byler, 1997:310). The results of this study found a coherent set of beliefs among the teachers, corroborating other literature in early childhood education studies (Kim et al., 2005:443; Maxwell et al., 2001:434; McMullen et al., 2005:461). However, Stipek and Byler (1997:314) observed differences based on grade level. Among the three groups in the study, preschool teachers reported more pressure, especially from among parents from low social economic status, to include skills oriented work in their practice (Stipek & Byler, 1997:317).

This study adds significantly to theory about the differences among kindergarten, preschool and grade one teachers in their beliefs, and their practices, besides the link between teaching level and teacher qualification. However, this was a comparative study among kindergarten, preschool and first grade teachers, whose expectations about how children learn might differ, depending on the developmental level of children in their class. Moreover, the qualifications of the participants in the study ranged from a high school diploma to a Master’s degree (Stipek & Byler, 1997:310), an inherent difference that might vary the interaction, since education level influences a teacher’s beliefs (McMullen & Alat, 2002; Wilcox-Herzog, 2002:84). The observations were limited to an average of two hours-per-class, a limitation that might not have eliminated response-set (Shaughnessy et al., in Cohen et al., 2007:410). A quantitative approach using a Likert scale to measure beliefs might also limit real access to teachers’ beliefs that reside deeply in a person’s subconscious, and so impossible to capture in a self-reported measure because sometimes teachers tend to engage in response-set, reporting what they think the researcher wants to hear (Vartuli, 1999:508). Therefore, a qualitative approach suggested for the current study might access in depth the factors related to beliefs. Teachers in the current study only hold a certificate in an area of early childhood, in contrast to the higher-level qualification held by teachers in Stipek and Byler’s (1997) study, since the
teachers’ qualifications appear to influence beliefs (McMullen & Alat, 2002; McMullen, 1999; Wang et al., 2008:245).

Wilcox-Herzog and Ward (2004) concluded from the results of 71 teachers in their study that beliefs are predicative of intentions. These teachers had secured varied certifications (the lowest qualification being a Child Development Associate), and varied experience (with nine years or more experience) teaching three- to five-year-olds. The study used a self-report questionnaire to assess teachers’ perceived ability to practice their beliefs and intentions, besides assessing the importance of varying types of interactions with children. Consequently, this study found that a teacher’s depth of childcare training related to their intentions (Wilcox-Herzog & Ward, 2004), reflecting a similar finding by other scholars that education matters in teacher beliefs (McMullen & Alat, 2002; McMullen, 1999; Wang et al., 2008:245). Child educators with the least and most training felt that they were interacting with the children, as they should. Interestingly, teacher-aides felt that they were in a better position to practice their beliefs than did teachers.

This study adds to knowledge of the importance of using beliefs to predict intentions. However, the possibility that teacher-aides reported engaging in appropriate behaviour with the children, more-so than did the teachers, demonstrates the different self-perceptions in relation to beliefs and the contradictions that could arise between the time of training and the actual experience. Further, this implies that there are exigent factors between the time of training and the actual professional practice, impeding teacher’s ideal professional practices that require further scrutiny. As mentioned above, this study used self-reports, which are prone to response-set. In addition, the study only measured intentions, not practices. The results would have varied had an actual assessment of the teacher and teacher-aides been done. Although my study does not include teacher-aides, I interview teachers based on children’s educational experiences, using in-depth interviews to mitigate the shortcomings of self-reported questionnaires, as this reflects the variations by grade, as Vartuli (1999) concludes.

Vartuli (1999) explored the way the continuum of teachers’ beliefs varied across grade level and how those beliefs related to classroom practice among kindergarten, first-, second- and third-grade teachers’ beliefs. The study measured self-reported practices, with three different instruments. In the study, 137 educators participated, comprising 18
Head Start, 20 kindergartens, 33 first-grade, 33 second-grade and 33 third-graders. Teacher education levels varied with the highest having attained a master’s degree and certification in elementary education. Vartuli’s (1999) study found that teachers’ beliefs moderately correlated with observed practices, and supported what teachers reported as their beliefs and practices. However, teachers’ self-reported practice and observed practice tended to decrease as the grade level increased. Teachers in the ‘head start’ and kindergarten classes were more conscientious about developmentally appropriate practices than were teachers in the second and third grades. Further, teachers with less or and more teaching experience, and those with certification in ECE, seemed likely to embrace developmentally appropriate strategies. Vartuli (1999) concluded that teachers’ beliefs varied across grade level.

Vartuli (1999) established a correlation between beliefs and classroom practices, among the kindergarten and elementary school teachers, providing the rationale for my study to use beliefs as a basis to explore the practices observed. However, Vartuli’s (1999) study compared teachers from kindergarten through to grade three who might have had different expectations for their children, which might in turn determine their classroom experiences because of the developmental differences among children across the classes. These teachers had higher levels of education (up to master’s); a characteristic that varies from my current study, where the participating teachers are all certificate-holders working with only preschool children (three-five-year-olds). As a result, it is reasonable to assume that the age-level of the children in a classroom could vary according to the way a teacher interacts with them, hence the results. A teacher’s education level could also influence his or her beliefs (McMullen & Alat, 2002; McMullen, 1999; Wang et al., 2008:245), in addition to their style of interaction. Teachers’ role-perception and their images of a ‘good’ teacher might vary according to the skills that they value as important to develop in children, regardless of national standards that support DAP (Li 2003), contrasting the study by Lee (2006).

Preschool teachers ought to embrace pedagogical practices that promote children’s holistic development (Lee, 2006:439). To explore 18 preschool teachers’ beliefs about appropriate pedagogy for four-year-olds, Lee used teacher-directed and child-centred video-clips to elicit teachers’ beliefs. Each of the teachers viewed the clips and later discussed their observations with the researcher. Lee (2006:439) concluded that all the
participating teachers endorsed the belief that the curriculum should draw from children’s interests, apart from the need to treat each child as an individual in the learning process, as they learn at their own tempo. Moreover, all teachers in the study subscribed to child-directed classrooms, where children enjoy a sense of freedom in the learning process that should embrace activities that they enjoy (Lee, 2006:435).

Regarding the use of video-elicitation (Harper, 2005:757; 2004:232; 2002:14-15; Pink, 2004:392), a method adopted in my study, Lee’s study is useful in highlighting the pedagogic strategies preferred by the teachers, as it embraces the holistic development of children, endorsing child-directed approaches as espoused in the DAP framework (Bredekamp & Copple, 1987; Kostelnik et al., 2004). Child-centred beliefs reported by Lee (2006) resonate with the findings of Parker and Neuharth-Pritchett (2006), who found that even though teachers in their study were under increasing pressure to use teacher-directed approaches, they still subscribed to child-centred pedagogy. Even so, since teachers in Lee’s (2006) study endorsed child-directed learning, there is a suggestion that this might not necessarily reflect in their actual practice.

Therefore, although the clips elicited the teachers’ beliefs, such beliefs remain hypothetical, since these were only clips, and as such, beliefs derived from watching a clip might not easily translate into practice, given that teaching is a complex process (Cochran-Smith, in Goldstein, 2007a:51; Goldstein, 2007b:382, 396; Parker & Neuharth-Pritchett, 2006:69). Human interaction and decision-making might be much more dynamic and intricate than can be discerned from a video clip. In contrast to Lee (2006), whose video elicitation relied on two pedagogic extremes, namely child-centred and teacher-directed clips to gauge teacher beliefs, my study uses a visual elicitation of a broad range of children’s actual educational experiences that might locate the teachers’ emerging beliefs in their actual practices along a continuum.

Winsler and Carlton (2003) found that staff beliefs and desires of a child-centred approach to learning could actually be different in practice. To explore the centres’ interpretation of child-centred instruction in relation to children’s daily activities, social affiliation and classroom practice, staff interviews and classroom observations indicated that their beliefs were not congruent with practice. Winsler and Carlton (2003) observed that children spent less time engaging in focused learning activities and only limited time

**Voyage 2: Linking with other voyagers in a similar direction**
McMullen (1999) concluded that teachers who held high beliefs about DAP were likely to embrace DAP practices. Her conclusion that teachers who have a qualification in early childhood are likely to embrace DAP, was later corroborated by McMullen and Alat (2002) and Yoo (2005). McMullen (1999) reports findings of 20 early childhood professionals teaching children in the age range of between three and eight years, all qualified with a Bachelor’s or Masters degrees in ECE, early childhood special education, child development or elementary education. The findings of this study revealed a difference in DAP beliefs among preschool and elementary teachers’ beliefs, as preschool teachers scored highly on DAP measures. McMullen (1999) concludes from this study, that some factors, such as the educational level of the teacher, their internal locus of control, and their self-efficacy beliefs, positively influenced teachers’ DAP beliefs and practices. The more internally controlled, high in self-efficacy, and qualified with an early childhood qualifications a teacher was, the more DAP they embraced, both in their beliefs and practices.

To be gleaned from McMullen’s (1999) study is that some personality-related factors are likely to influence whether a teacher embraces DAP, in addition to the difference that teacher qualifications make in their predisposition to use DAP. However, this study compared preschool and elementary school teachers on aspects of their practices in relation to DAP, using a quantitative approach, among teachers qualified with either a Bachelor’s or a Masters degree in an area of child development, unlike the current study which focuses on teachers’ beliefs and practices in a continuum of DAP-related constructs, using a qualitative approach.

Parker and Neuharth-Pritchett (2006) confirm the probable sources of pressure documented by McMullen (1999), because they found that teachers were increasingly under pressure to devote more time to academic skills development, which seemed to contrast their knowledge of using DAP, in preparation for first grade (Parker & Neuharth-Pritchett, 2006:71). Their study, which explored 34 kindergarten teachers’ beliefs about their instructional practices and the forces that shape education, concluded...
that kindergarten had become increasingly academic. Conducted in a school in the south-eastern USA, using a mixed method approach, it found that while some teachers remained child-centred, others used teacher-directed approaches, and the rest blended both approaches. Parker and Neuharth-Pritchett (2006:71) concluded that there seemed to be two types of pressure experienced by the teachers, i.e. overt and self-imposed sources of pressure. The former originate from external forces, such as next grade preparation, while the latter related to teachers’ own initiative to use teacher-directed approaches, because of perceived benefits, such as teacher control. This study informs my study about the possible sources of pressure that might inhibit teachers from using the DAP. However, it also differs from my study because it focused on the teachers’ beliefs and practices among 34 teachers using a mixed-method approach, whereas I used a qualitative approach. In addition, the teachers researched by Parker and Neuharth-Pritchett (2006) were in a kindergarten, whereas those in my study taught four- and five-year-olds.

The pressure for academic skills might sometimes be a response to parents’ demands, as Stipek and Byler (1997:317) observed. In their study, teachers responded to pressure from parents by increasing children’s homework, giving more academic-oriented work, tutoring, and giving weekly spelling tests, even though they disapproved of such measures. Kwon (2004) corroborates the contrast between teacher practices and their beliefs in a Korean study.

Preschool teachers in Korea did not embrace the national policy guidelines for preschool education, which, according to Kwon (2004) supports a child-centred curriculum. Using a Likert scale, unstructured interviews of teachers and observations of specific children, Kwon (2004) established that despite explicit guidelines emphasising child-centred practices to foster creativity and individuality, teachers used direct approaches, including extrinsic motivation, worksheets and separation of playtime from work time - processes considered inappropriate in Western culture. The researcher’s suggestion, though not derived from the study, was that such a discrepancy could be due to several factors, such as the reflection of Korean traditional education values, the low adult-to-child ratio, and parental pressure. This study confirms the existence of teachers’ dichotomous view of children’s work and play, a view that may hinder teachers’ use of play in learning activities.
This study also indicates a possible reason for teachers not implementing policy guidelines as residing elsewhere, apart from concerns for remuneration, since the provision of preschool education in Korea was mainly state-provided. In Kwon’s study, teachers were selective of the materials that they used. Therefore, the contrast between national guidelines and the actual practices reported by Kwon might suggest a possibility that Montessori philosophy and its guiding principles that emphasize use of materials, and that actual practice could be at variance. The present study seeks to explore preschool teachers’ beliefs of developmentally appropriate practices, as played out in their classrooms, and the factors influencing them.

Cassidy and Lawrence (2000) have explored the rationale given by a mixed ethnic group of preschool teachers for their activities and behaviours. The sample included 12 female preschool teachers selected from three varied childcare centres in the USA, with qualifications that ranged from graduate studies in Psychology, Bachelor’s’ degree in ECE, Associate Degrees in ECE and College Education. One teacher had no formal education. Their experience level ranged from three to 20 years, with a mean of seven-and-a-half years of early childhood experience. Their ages ranged from 26 to 52 with a mean of 34 years. Three of these teachers taught in preschool classrooms, two taught two-year-olds, four taught in one-year-old classrooms, while three teachers handle infant rooms. Through one-hour videotaped observations of each teacher’s classroom, the researchers collected data in blocks of 20 minutes in each of the following activities: free play of small group activity time, large-group time, and mealtime. The amount of observed actual time spent in each of these activities varied according to the age group with which each teacher was working. Overall, teachers displayed concern with children’s socio-emotional development and with managing their behaviour. For these teachers, areas such as language and physical and cognitive dimensions took a peripheral emphasis.

Cassidy and Lawrence show that teachers might be selective in their emphasis on some areas of child development areas, such as emotional development, relegating domains such as language, physical and cognitive dimensions (Cassidy & Lawrence 2000). Teachers attributed their classroom practices to their experience and education, therefore informing the current study about some of the factors that might influence teachers’ beliefs. In addition, Cassidy and Lawrence (2000) provide a significant rationale for the
present study because they identified a very important gap, i.e. the relationship between age group, beliefs and practice. Further, in this study, teachers attributed practice to experience rather than to education, contrasting the findings from other studies that found teachers’ education influenced their beliefs and practices (McMullen & Alat, 2002; McMullen, 1999; Wang et al., 2008:245).

The children in this study were younger (infancy to two-year-olds), and in an environment that might be expected to provide childcare more than school transition-academic skills-related activities. In contrast, preschools in Kenya are largely centre-based, often serving the role of school transition for children aged between three and five years (Prochner & Kabiru, 2008:128). Therefore, since the experiences of teachers might vary, depending on social expectations, it is reasonable to assume that results from a different study could also vary. Setting contexts could vary the expectations in children’s experiences and priority areas in their development, as observed by Pang and Richey (2007:8).

Pang and Richey (2007:8) conclude from their anecdotal observations that preschool experience for children and parents in China is different from that in the USA. Whereas the preschool experience in China is likely to be highly structured, focusing on order, academic skills-oriented teacher directed approaches, in the USA it is likely to emphasize hands-one experiences (Hall & Robinson, in Pang & Richey, 2007:7), encouraging open interactions, creativity, sociability, and self-confidence in children. Moreover, educators in the USA might view parents as partners in their children’s learning, unlike in China where parents are likely to feel afraid to raise issues on their children’s education (Xu, in Pang & Richey, 2007:4).

Meanwhile, in Hong Kong, Pui-Wah and Stimpson (2004) sought to explore kindergarten teachers’ understanding of play, approaches used, difficulties faced, and their power in finding solutions. Six kindergarten teachers were involved in an in-depth qualitative study, exploring their covert sense-making processes in implementing play. The researchers found that teachers’ own rigid and mechanical thinking prevented them from including play in learning, even when they desired to. The study established that teachers’ use one of three teaching and learning orientations, these being the technical, the fluctuating and the inquiry which reveals how thinking is involved in pedagogical shifts towards play-based learning. The findings of Pui-Wah and Stimpson, (2004)
provide insight into the role that teachers’ beliefs have in their classroom decisions to use play or otherwise. Despite a desire to use play in their teaching, teachers failed to do so, perhaps out of certain undesirable consequences from their circumstances. Besides external pressure, Pui-Wah and Stimpson, (2004) demonstrate that there might be preconceived notions about child-centred activities that hinder teachers from embracing these. However, the experiential circumstances of the Hong Kong teachers are likely to be significantly different from those in Kenya, hence the results cannot be generalised to this setting.

In another Hong Kong study, Wong (2003) explored how the ways early childhood teachers’ and their principles’ attitudes to the implementation of a top-down curriculum reflected on their job satisfaction. Using an in-depth qualitative interview and group interviews, the researcher explored teachers and principles’ reflections on their contrasting role perceptions as principle and as teachers respectively. Accordingly, one teacher-turned-principle confirmed that the two roles were different, and that each required different knowledge and skill levels. The teachers who previously used direct teaching resigned midway, when they were required to use a child-centred approach, citing lack of knowledge and skills, and more work involved in the new approach (Wong, 2003:46). However, when these teachers were equipped with the requisite knowledge and skills for implementing the project art, they reported a higher level of satisfaction attributable to the newly acquired knowledge (Wong, 2003:50). In spite of their reported higher levels of satisfaction, the need to respond to an external schedule to keep pace with the school administration introduced coercion to their schedules, which led to dissatisfaction (Wong, 2003:50). In this study, when the principals were not supportive, the student teachers found it difficult to nurture the children (Wong, 2003:51).

This study is important because it highlights some of the dynamics of curriculum implementation, such as perception of individual competencies, adequacy of skill, and support from the school administration (Wong, 2003). It also highlights some factors that negatively influence the implementation of the curriculum, such as pressure to adhere to school routines and programmes. However, Wong’s study focused on teacher trainees and experienced preschool teachers who felt that the new ways of teaching were stressful for them. This implies that their experience had stabilised their beliefs about teaching,
and made it difficult for them to change, unlike the in-service teachers who were still undergoing training. Moreover, Wong’s study was a comparative analysis of beliefs among early childhood teachers and principals, unlike the present study which seeks to explore preschool teachers’ beliefs of developmentally appropriate educational practices.

2.7.4 BELIEFS ABOUT CHILDREN’S LITERACY EXPERIENCES

This section reviews empirical studies related to children’s literacy activities. Early literacy development has been defined as “the ways in which young children acquire understanding, skills and knowledge related to aspects of early literacy such as; using books, early writing, using environmental print and aspects of oral language” (Nutbrown, 2007:32). My research was not solely about literacy development, but educational experiences that I conceptualize to include literacy development (process). It also examines the content of such experiences and related activities, such as the use of materials and the interpersonal relations, e.g. attention to children’s learning differences.

The literature on early teachers’ beliefs is voluminous, however I review only a few studies to provide insight into aspects of literacy that might be useful when interpreting my data. Therefore, the review will focus on teachers’ beliefs of children’s literacy experiences. Practitioners’ beliefs about literacy and interpretation of the curriculum affect their provision of children’s literacy (Miller & Smith, 2004). In addition, training and experience, perceived external pressure from the demands of primary school curriculum, and parental pressure, all add to the different interpretations of the same curriculum (Miller & Smith, 2004). The researchers examined the relationship between curricula as a basis for guided teaching at the foundation stage in literacy teaching, and the way these influenced children’s experiences of literacy. In four diverse settings in London, the researchers spent five days in each setting. Using interviews, they captured data from playgroup leaders, nursery class teacher, two reception class teachers and the group leader in the day nursery. Each interview was audio-taped and analysed according to grounded theory. Three themes related to literacy that might be relevant to my study emerged, namely parental involvement, the curriculum and the children’s experiences. Miller and Smith (2004) noted differences in literacy provision, and the delivery of the literacy curriculum between each setting, concluding that children had limited free
choice activities in the multilingual reception class, and that the National Curriculum that emphasized testing seemed to be influencing children’s experiences of literacy.

Miller and Smith’s study (2004) provides insight into the current study, by showing a relationship between beliefs and practices, besides the possibility that practitioners might interpret and implement the same curriculum differently. The study also suggests a conflict between early learning curriculum and national examination demands, which led to fewer free choice activities. It also emphasizes that children’s experiences vary, depending on teachers’ choices in their actual practices. However, Miller and Smith (2004) focused on literacy activities, which might reflect the concept of literacy acquisition in a much-enriched preschool environment, as the literacy checklist of forms of literacy materials reflected. Additionally, the study followed a mixed-method approach, one that could have privileged the findings. In contrast, a qualitative approach in the current study explores all the children’s educational experiences in connection with teachers’ beliefs.

Foot et al. (2004) explored eight early childhood teachers’ beliefs and practices, working in periodic and full-day kindergartens, with a ratio of three teachers for every 45 children. The results of the study indicate that all teachers perceived books and stories, print-rich environments, and children’s own initiated activities, as part of DAP literacy experiences. They were embracing integrated play-based activities, with adults interacting in many processes such as talking, reading, story-telling, listening, conversing, answering questions as well as retelling their stories. In addition, teachers valued opportunities for children that encouraged recognition of letters, sounds, writing their own names and frontal talking, as additional processes of encouraging literacy (Foot et al., 2004:139). This study might suggest that the teacher-child ratio determines the direction of literacy interactions. The higher the ratio, the more sustained the conversations observed (Foote et al., 2004). In addition, the more time children had at school, the more interactive opportunities they had to engage in literacy, as observed in full-day kindergarten. Foot et al. (2004:142) concluded that teachers’ pedagogical practices have the potential to limit or expand children’s literacy experiences.

Foote et al. (2004) highlight the importance of a high teacher-child ratio in enhancing literacy-related interactions. Apart from the role played by a high teacher-child ratio in facilitating engagement with literacy environment, this study also allude that the children
who attended full day Kindergartens had more time to engage with their own activities (Foot et al., 2004). Ironically, though, this study advocates full-day kindergarten, and yet research links a long duration in kindergarten to a high level of stress in children (Vermeer & van IJzendoorn, 2006:39). Overall, Foote et al. (2004) imply that appropriate beliefs do not always translate into practice, perhaps due to dynamic factors extraneous to the classroom, and that could still require further investigation, such as education and experience (Yoo, 2005).

The highest level of education and experiences were two factors that appeared to influence beliefs and literacy according to a study in South Korea by Yoo (2005). The mixed methods results indicated that there was a significant difference among teachers with different academic qualifications, in their beliefs about children’s literacy. Incidentally, the number of years did not seem to influence teachers’ beliefs about literacy because the quantitative analysis indicated that there were no significant differences among teachers with varying levels of teaching experience (Yoo, 2005:139). However, the teachers ages, ages of children and years of teaching experience did not seem to affect teacher’s beliefs (Yoo, 2005:142). This study indicates that the teachers’ training in certain methodologies seemed to affect their beliefs more than other variables.

The teachers supported a print-rich environment for the development of literacy, emphasizing listening, writing and reading as requisite components in language acquisition. Specifically, teachers preferred whole sentences to individual letters approach in teaching language (Yoo, 2005:143). They stressed the role of their own early exposure to books as a contributory factor influencing their choice of language teaching strategy. However, teachers who scored low on literacy beliefs emphasized the role of children’s memorization of the alphabet through letter recognition, as a strategy of learning to read and write. Included in their emphasized strategies was learning to read from single letters to whole sentences through repetition, tracing and copying letters.

Yoo (2005) provides insight into the current study in that it gives perspectives on teachers’ literacy beliefs, which may predispose them to teach children language in certain ways congruent with their beliefs and a possible reason for the choice of such beliefs. However, the study focused on self-reported methods used by the teachers in language development, a method prone to bias, as cited above as a shortcoming in quantitative studies using self-reports.
2.7.5 A SUMMARY OF RESEARCH ON TEACHER BELIEFS

Internationally, studies of preschool teachers’ beliefs and practices are divergent in scope, with many and mixed findings on teachers’ beliefs (Goldstein, 2007 a & b; Kim et al., 2005:443; Maxwell et al., 2001:443; McMullen et al., 2005:461; McMullen, 1999; Stipek & Byler, 1997:318; Parker & Neuharth-Pritchett, 2006; Wang et al., 2008:243; Yoo, 2005).


Factors cited that influence teachers’ beliefs include pressure from parents (Kim, Lee, Suen, & Lee, 2003:347; Li, 2003:19; Phillips, 2004; Stipek & Byler, 1997:317; Winsler & Carlton, 2003:155), differences in grade level (Kim et al., 2005:54; Vartuli, 1999:499), and teacher education level and experience (Cassidy & Lawrence, 2000:201; Maxwell et al., 2001:435; McMullen & Alat, 2002; McMullen, 1999; Yoo, 2005). Additionally, variations in interactions could result from different perceptions pertaining to school readiness (Cuskelly & Detering, 2003:45; Lin, Lawrence & Gorrell, 2003:234; Parker & Neuharth-Pritchett, 2006).

Evidently, there are few studies that investigate teachers’ beliefs in contexts other than that of the USA (Wang et al., 2008:230), or the application of DAP in developing countries (Jambunathan & Caulfield, 2006). In addition, findings from these predominantly Western studies are incongruent, suggesting that the topic of teacher beliefs could be far more complex than theorized (Wilcox-Herzog, 2002:83; Goldstein,
2007b; Parker & Neuharth-Pritchett, 2006), or that even the concept of child-centred teaching might not easily translate to practice (Sugrue, 1997).

Therefore, such contradictions suggest the intricate nature of teachers’ beliefs as a product of teachers’ interactions in a social system as dynamic as the school (McMullen, in McMullen & Alat, 2002), or teacher’s level of education (McMullen & Alat, 2002:83-84; McMullen, 1999; Wilcox-Herzog, 2002; Yoo, 2005). Other factors include experience (Cassidy & Lawrence, 2000), measurement specificity, and autonomy to practice beliefs (Wong, 2003), perhaps contributing to the emerging disparities between teachers’ beliefs and their practices. From this previous empirical groundwork, I synthesize the justification for my study in the following section.

2.8 FINDING MY WAY FROM PREVIOUS STUDIES

As we come to the end of the literature review, the following have emerged as points related to my findings:

- Incongruous findings between beliefs and practices as cited in this chapter might mean that the beliefs and practices discourse might be far more complex, requiring further scrutiny.

- Methodological limitations: self-reports of teachers beliefs might not capture or access the intricate nature of beliefs through further questioning (Pretti-Frontczak & Johnson, 2001; McMullen & Alat, 2002; McMullen et al., 2005; 2006). I used visual elicitation to explore and access beliefs.

- There is a need for studies that map teachers’ beliefs in their work realities and their social contexts, to reflect how teachers in other contexts other than the USA have adopted the DAP framework (Jambunathan & Caulfield, 2006; Wang et al., 2008:230). In this study I embrace the bioecological theory to provide a context-specific paradigm to interpret preschool teachers’ beliefs and children’s educational experiences.

- There seems to be no study that has focused on all the five constructs, namely teaching strategy, use of materials, scheduling, assessment and consideration of individual differences, so as to explore how they might relate to each other, in a continuum level of DAP from high DAP to low DAP.
Beliefs and practices of teachers with certificate qualifications in areas of child development seem limited. Most studies have focused on teachers with Bachelor’s degrees and even Masters qualifications.
2.9 A SUMMARY OF THE LITERATURE FOCUS

The literature review has focused on various facets of early childhood education that will illuminate the study findings and my interpretation of data. Some of the areas covered in this section include the origins and development of early childhood education and the Kenyan context of preschool education. In addition, empirical studies that include various facets of teachers’ beliefs, DAP-related studies, classroom interactions and beliefs about literacy, have been presented. From the empirical studies as juxtaposed with the dynamics of preschool education in Kenya, I have also synthesized how my approach might be different from that taken in previous studies, hence the possible contributions of the current study.

A brief sojourn after voyage number 2

R: Hi, we need to review what we have ‘seen’ and ‘heard’ in our journey so far...in summary, chapter two is about...

Those who watched and ‘wrote’ the history of ECE

Travellers in the terrain of various facets of teacher’s beliefs

The sojourners of preschool developmentally appropriate practice

The explorers of preschool interactions, the trekkers through the mountains of preschool teaching strategies

The landscape of Montessori learning, this was necessary so that we appreciate

The need to chain link, with other scholars gone before us,

Especially, so that we appreciate the uniqueness of this journey,

Never any like it before, only similar, so that later it should be clear, how the study fits into the past,

Especially, of the images we see, and the voices behind the actions in the next voyage,

But most importantly,
For now, we need a reason to go further along, on this different journey

Coming up next in voyage 3, a paradigm search and methodology

Voyage 2: Linking with other voyagers in a similar direction
Roadmap of the terrain of voyage three

R: I invite you to...

My intellectual heart, first
(Paradigm journey)

A view of the lens that I choose
(Qualitative approach)

Zooming in on the chosen lens
(The constructivist paradigm)

What type of camera suits me
(The case study)

Which terrain do I go with my lens?
(Preschool/Montessori and DICECE)

Whom do I invite for this leg of the journey, to help me to hunt for answers?
(Preschool teachers and children)

What do I choose to focus on?
(Formal learning interactions and teachers' beliefs of DAEP)

How do I focus (observe, and interview) &
How do I get the best of my focusing?
(Recording)

Ethical considerations for the study
(Precautions to ensure the protection of my journey companions)

Looking back to what might have been?
(Reflecting on the limitations of the study)
3.1 INTRODUCTION

Part one of this voyage addresses the genesis of my intellectual quest for a research paradigm, which I connect to my epistemological and ontological metamorphosis, before locating the research in the qualitative paradigm. To this end, I critically explore issues related to paradigms, to be conscientious about the research journey. In the second part, I justify how the constructivist paradigm fits with my study, consistent with the assertion of Maxwell (2005:79) that the choice of design depends on contexts and issues of study. In addition, I discuss the methodology, which includes the case study design, sampling decisions, a brief of the study area and the data generation strategies. I conclude with a section on ethical considerations for this study. The section on data analysis and the presentation framework follow in chapter four.

3.2 THE PARADIGM JOURNEY SEARCH

3.2.1 IT ALL STARTED HERE…

Before I enrolled for doctoral studies at the University of Pretoria, and the subsequent research support sessions presented to all doctoral students at the Faculty of Education, I had had limited exposure to the discourse of paradigms, much less, the need to situate a study within a paradigmatic framework (Rubin & Rubin, 2006:20-21; Mertz & Anfara, 2006:189; Hesse-Biber & Leavy, 2006:12). More so, the positivist exposure I previously had, advocating a quantitative approach to research had imprinted in me a template of research as a quantifiable process (Denzin & Lincoln, 2005:11; 2000:8; Flick, Von Kardorff & Steinke, 2004:9; Hesse-Biber & Leavy, 2006:6, 13).

Some characteristics of quantitative research, among them measurement, objectivity and predictability, to me, were synonymous to scientific research. Equally, in my research template was the formal language to reflect scientific neutrality (Bogdan & Biklen, 2007:201-202; Badenhorst, 2007:138-139; Denzin & Lincoln, 2005:10; Rubin & Rubin, 2005:251-252; Thody, 2006:130). Altogether, I had learnt that research needs to be done “within a value-free framework” (Denzin & Lincoln, 2000:8), in an objective process within controlled scientific procedures (Flick et al., 2004:9; Hesse-Biber & Leavy, 2006:6, 13).
Conversely, in the contact support sessions, one professor echoed the sentiments of authors such as those of Bogdan and Biklen (2007:201), Guba and Lincoln (2005:209) and Henning, Gravett and Van Rensburg (2002), who stress that qualitative research privileges the researcher’s voice as it locates it in the research process. Accordingly, referent to the researcher (or the self) in a qualitative approach should be an “I” as contrasts “the researcher” as if referring to someone else “out there” or ‘the voice from nowhere’ (Lather in Guba & Lincoln, 2005:209). Schon and Whitehead (both in McNiff, 2008:352), agree that there is an increasing trend in scholarship to use ‘I’ as a new form of scholarship to generate living forms of theory.

However, coming from a positivist paradigm, naturally, this exposure jolted my thinking somewhat, from the comfort of the quantitative schooling I had. This new realization disturbed my research knowledge equilibrium. My research paradigm spirit was unsettled. The exposure to flexibility entrenched in the qualitative approach that locates me in text resulted in a cognitive dissonance of sorts. I realized that I needed a research paradigm renaissance to encompass the qualitative approach to accommodate my new growth in scholarship.

I needed a paradigm shift. Consequently, this new dispensation confronted me, not only to revise my old research repertoire, but also, to change my thinking to include the qualitative approach. This ‘new realization’ was to affect my research journey throughout. In the months that followed this new ‘discovery’, as I endeavoured to understand the role of a paradigm in research, I experienced intellectual tensions arising from the discourse on paradigm. It was clear after the support sessions that I could use the quantitative and/or quantitative approach. However, before this significant decision to situate my study in either of them, I needed to acquaint myself to the genesis of the knowledge claims of each of them, even as the paradigm war continues (Bryman, 2007).

3.2.2 CLARIFYING THE PATH TO FOLLOW

Paradigm wars or the assumptions that undergird quantitative and qualitative research exist and are likely to continue because of the perceived ‘differentness and incompatibility of [qualitative and quantitative] approaches’ as ‘fundamental philosophical issues about the nature of the human being and society’ and how to study it
Therefore, the whole discourse in models of research originates from philosophical issues of ontology, epistemology, and methodology, all of which constitute a paradigm framework. Ontology addresses issues of the nature of the human being, and that of reality; epistemology explains the relationship between the inquirer and the known, and methodology embraces procedures of accessing and gaining knowledge from the world (Bryman, 2007; Denzin & Lincoln, 2000:19; Denzin & Lincoln, 1998:185-6:201; Guba & Lincoln, 2005:192; Hesse-Biber & Leavy, 2006:12; Mertz & Anfara, 2006:189; Rubin & Rubin, 2005:20).

Bryman (2007:13-14) observes that whether to refer to the qualitative and the quantitative approaches as paradigms is a different matter, but reiterates that underlying each of these are methodological, epistemological and ontological assumptions. The positivist paradigm usually relates to quantitative research whereas constructivist and interpretivist paradigms relate to the qualitative approach. Other paradigms have since continued to emerge.

Denzin and Lincoln (2005:1-30) present a time-line of eight moments to highlight the emergence of different paradigms from 1970s. However, Jahoda et al., (in Bryman, 2007:15-16) dates the existence of qualitative research prior to this date, noting:

A study of a community with high unemployment and originally published in German in 1933, is a veritable smorgasbord of data sources, some of which are quantitative and some qualitative (Jahoda et al., in Bryman, 2007:15-16).

The existence of this research using a qualitatively approach prior to the 1970s, might result in another possible dispute about the fundamental cause of start of the paradigm wars (Bryman, 2007). However, aside from the history of paradigm wars, Denzin and Lincoln's (2005) discussion replete with dissuasions and persuasions is valuable in clarifying the nature of controversy and its development.

A critical reading of the literature about the controversy and resistance to paradigm options and choices reveals constantly shifting spaces and issues to engage. In the beginning, the resistance was about the potential of qualitative approach to contribute reliable knowledge (Denzin & Lincoln, 2005; 2000; Guba & Lincoln, 2005; Flick et al., 2004). For the hardliners then, qualitative research lacked the rigor reflected in quantitative research (Flick et al., 2004; Hesse-Biber & Leavy, 2006). Denzin and
Lincoln, (2005:3, 8; 2000:7) argue that in this discourse, quantitative scholars assumed supremacy over qualitative researchers, referring to the latter as ‘soft scientists or journalists’.

Paradigm skirmishes are not only limited to the duality of the basic assumptions of the quantitative and qualitative approaches, as there have also been intra-paradigm wars (Bryman, 2007). For example, besides hegemonic nuances, resistance to qualitative research arose from its perceived approach to research as a colonisation process, which depicted the researched as those savages from other non-white cultures (Denzin & Lincoln, 2000; Guba & Lincoln, in Guba & Lincoln, 2005; Smith, 1999; Swadener & Mutua, 2007; 2008). Swadener and Mutua (2007; 2008) extend the definition of colonialism to include cultural imperialism in approaches to research, which excludes the experiences of the indigenous, racial minority and disabled groups, even within the qualitative approach.

Further, Smith (1999:1) deconstructs a colonialist approach to research. Although she locates her discourse among the Maori, she observes that ‘the term research is inextricably linked to European imperialism and colonialism’, and suggests that the term ‘research’ is probably one of the dirtiest words in the indigenous world’s vocabulary’. In this discourse, the culprit is hierarchical research, with a supposed superiority of the colonialist to possess knowledge than the colonized ‘other’. To counter the concept of colonialists as legitimate sources of knowledge, Smith (1999:36,60) criticizes this perspective and calls for space in which the indigenous can chart their research agenda (Denzin & Lincoln, 2008). Smith (1999) raises an ontological as well as an epistemological issue, and how previous researchers, even as they researched among the indigenous people, excluded them as knowledgeable in the research process.

Apart from excluding ‘the researched’ from contributing to their own agenda about research in contexts in which they understand best through their experience, another concern that might illustrate the limitation of some of the colonial approaches to derive legitimate knowledge, hence the disquiet among indigenous scholars suffices. Smith (1999:60) acknowledges that research that sorts people as ‘nearly human, ‘almost human’ and ‘sub-human’, as attributes of possessing a ‘soul’, which became the basis of educating or offering them salvation, is not only reminiscent of colonial power and domination, but is also highly deficient in defining personhood. Denzin and Lincoln,
(2008:4), agree that the qualitative approach, in many of its characteristics might embody the colonial approach to research. This is just one perspective demonstrating the hegemonic tendency of academic discourse to privilege one over the ‘other’, as might be the source of paradigm skirmishes.

Currently, paradigm controversy reflects issues of “politics and ethics of evidence and the value of qualitative work” (Denzin, 2008:316), subjectivity inherent in designing qualitative research and the use of non-randomized samples (Denzin & Lincoln, 2005:2; Denzin & Lincoln, 2000:7-8; Guba & Lincoln, 2005:191-2; Flick et al., 2004; Reyna, in Nespor, 2006:117). However, Hatch (2007) and Tesch, (1990) counter neutrality in research, as they argue that bias is inherent in human nature and experience, whether quantitatively or qualitatively researching.

As the paradigm debate continues (Denzin, 2008:316; Nespor, 2006:123), the qualitative approach has undergone rejection, (Seale, 2003:174), but there is an emerging tentative tolerance and acceptance towards its potential to contribute different forms of knowledge, or sometimes to complement quantitative research (Bryman, 2007). Lincoln and Denzin (2003) confirm that “qualitative research…played pivotal roles in the ruptures, rifts and revolutions” following developments of new ways of doing research apart from the quantitative approach” (Lincoln & Denzin, 2003:3). Further, through an intellectual scrutiny by the scientific community, qualitative research continues to generate standards of judgment for its own plausibility and credibility, an issue that remains contentious (Seale, 2003:175).

From these shifting philosophical positions and re-alignments, clearly, some of the scholars initially opposed to the qualitative approach have since embraced originally contested paradigms. For example, Guba and Lincoln, (2005:200), argue that a paradigm framework should include issues about axiology (role of values in research). In what appears to reflect a flexible stance from their previous position on the qualitative approach, they note, “a second reading of the burgeoning literature and subsequent rethinking of our own rationale have led us to think that the issue is much larger than we first conceived” (Guba & Lincoln, 2005:200).

Regardless, discourse on paradigms might not be ending soon, as ‘there are occasional paradigm skirmishes’ (Bryman, 2007:17). Even though issues about paradigms are a
contested topic, there have been shifts in positions and tolerance to divergent views about each of them. Guba and Lincoln (2005:205) foresee a future where there will be harmonized acceptance of a dual objective reality, within the limitations of human subjectivity. Rather than focusing on differences, Guba and Lincoln, (2005), recommend an accommodative approach to explore paradigm similarities and differences. That moment characterizes the mixed-methods approach that advances the ‘complementary strengths thesis’ (Denzin, 2008:317) in which each paradigm approach acknowledge the contributions towards each other to strengthen research outcomes. During this moment ‘production of respite in hostilities’ between quantitative and qualitative research, which allows the ‘mixing of methods that cross the quantitative-qualitative divide’ emerges (Bryman, 2007:15). Denzin (2008) appears to support this position with the note, ‘I seek a non-military metaphor, something more peaceful, less combative. I believe we are in the midst of a complex set of discourses which are moving in several directions at the same time’ (Denzin, 2008:16).

The movement to tolerate and to accommodate the qualitative approach acknowledges that among other issues, bias and subjectivity is inherent in human nature, regardless of the paradigm position (Denzin & Lincoln, 2000:8; Guba & Lincoln, 2005:208; Seale, Gobo, Gubrium & Silverman, 2004:5). The qualitative approach accommodates an in-depth analysis of issues that might appear subjective. Besides, to use a qualitative approach might facilitate multiple views to emerge, giving voice to both the researcher and participants (Denzin & Lincoln, 2005:3; Guba & Lincoln, 2005:209; Hesse-Biber & Leavy, 2006:14,77; Creswell, 2002:49; Crossan, 2003:52-53; Thody, 2006:130). Denzin and Lincoln (2005) capture this multi-voice representation thus:

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive material practices that make the world visible. These practices transform the world. They turn the world into a series of representations including field notes, interviews, conversations, photographs, recordings, and memo to the self (Denzin & Lincoln, 2005:3).

The authors stress the advantage of qualitative research to locate both the researcher and the participant’s views in the text. Moreover, this embraces a world that exists in many forms, thus a dispensation to represent the world in multiple forms. As part of engaging with the paradigm issues, I have reviewed the contentious issues surrounding ontology and epistemology to foreground my own decisions relating to the same. The exposure to
paradigm debates and the shifting positions awakened my intellectual consciousness as a student of research. Therefore, more critically, I position my thinking closer to this debate as part of my decision to embrace the constructivist paradigm.

3.2.3 PARADIGM POSITION SHIFT AS INTELLECTUAL EXHILARATION BEGINS: THE SUPERVISOR’S ROLE

The section about the intellectual tensions I encountered with paradigm debates, already discussed in the preceding section, initially arose out of a discussion I had with Dr. Carien. She encouraged me to write down my thoughts. I later reworked this section after I got an e-mail from Prof. Irma quoting Edmund Burke that “All that is necessary for the forces of evil to win in the world is for enough good men to do nothing.” Although the latter was not solely about my thesis, she challenged my voice in research. These invaluable interactions with my supervisors turned out to be my paradigm search, as it re-awakened my level of introspection to embrace a scholar identity.

Whitelock, Faulkner and Miell (2008) locate the responsibility for originality and creativity in PhD students’ work on the supervision process. They list some of the processes identified by supervisors that lead to academic creativity; providing guidance while promoting autonomy, building confidence through positive feedback, encouraging risk taking, filtering knowledge, identifying problems, modelling, and sharing practice.

The interplay between some of these supervisor-related processes and the development of my thinking are evident in this discourse resulting from my doctoral paradigm journey. Apart from confidence building, promoting my autonomy, and periodic meetings to explore my thinking, another valuable strategy that my supervisors used was to encourage me to journal my thoughts. Somerville (2008:209) reflects from her experiences that

In educational research…pedagogical processes for research students in particular, there appear[ers] to be a closing down rather than an opening up of the possibility of generating new knowledge…concern from increasing press from supervisors towards standard forms of thesis production that come to stand in for pedagogies of doctoral supervision.

The call to supervisors is to open-up space for doctoral students to contribute original knowledge, rather than to restrict creativity through rigid measures, because the doctoral
program is ‘works in progress towards generativity as “the core of scholarship” (Boote & Beile, 2005:6). My experience was an “opening-up”, rather than a “closing down” (Somerville, 2008:209), especially in writing as a generative function.

Let me note from the start that, as a novice, I submit to the rules of discourse in the academic world. I also do acknowledge, like McNiff (2008:356) and Holliday (2007:116) that academic legitimacy as it operates in the genre of academics with specific standards of acceptance is acclaimed through peer interaction. Therefore, my discourse in this section does not negate my position. Rather, as I position myself in academic discourse, I have three objectives; first is to attempt reflexivity about my journey, secondly, contemplate the status quo to legitimise my identity [of PhD student], and thirdly and final, I aspire to learn the ropes of how to gain authority. Smith (1999:36) legitimizes my stance; ‘if we write without thinking critically about our writing, it can be dangerous’. Holliday (2007) too, provides me with the scholarly mandate at this point:

Showing what you have read is important, but not for the purpose of showing you know the ‘facts’ reside in there...therefore ‘good writing’ becomes a complex balancing act between showing what you have read, being critical about it, but doing this by still more citing of other people (2007:118).

In this section, I attempt a scholarly discourse with the politics of scholarship, from my position as a student of research. I discuss how my encounter with paradigm contestations stimulated an intellectual quest and a deep sense of introspection in me. Besides, I juxtapose the idea of such maturity with ‘an academic discourse community’ (Holliday, 2007:117-118). Lather (2006:47) justifies my attempt:

Teaching [or being taught] educational research in such a way that… [I as a student] develop an ability to locate … [myself] in the tensions that characterize fields of knowledge [because after all] we all do our work within the crisis of authority and legitimization, proliferation and fragmentation of centres, and blurred genres (Lather, 2006:47).

In the following section, I locate myself in the tensions inherent in paradigm choices. I engage in this discourse to highlight some of tensions inherent to the development of intellectual maturity. Therefore, while taking up this challenge, I embrace my own identity and voice as a doctoral student, and perhaps that of other doctoral students
whose ontological, methodological and epistemological stances will identify with my voice. Academic discourse has regimented style and language:

Language users are neither wholly subject to a monolithic language system, nor completely free to create their own meanings. There are contradictions and spaces in which they construct themselves (Huang & Archer, 2008:5).

Holliday (2007) locates this conflict even among writers well versed with conventions, noting that novice writers:

Find themselves newly constructed, not as experienced professionals, but as [junior members] of an academic discourse community which decides for them what they are allowed to say, how they are allowed to say it and who they are allowed to be as writers (Holliday, 2007:117).

Faced with these dialectically opposed identities of ‘emerging scholar’ and ‘student’, novice qualitative researchers need to negotiate through each of these because of the “need to become autonomous within a new, strange discourse...” (Holliday, 2007:117). These contradictions and spaces become the subject of my engagement with paradigm discourse.

I am also aware that as I write, I take a risk as I venture to develop my doctoral scholar identity. Smith (1999:36) warns; “writing is dangerous because sometimes we reveal ourselves in ways which get misappropriated and used against us”. From this warning, it appears that a doctoral scholar who engages critically in academic discourse might also need to take a level of risk. To reflect from my own experience, some of the questions arise; foremost, what potential risk does a doctoral candidate face by engaging in discourse that is contrary to supervisor stance? Another example: what potential risks does a doctoral student face by engaging in discourse for which they are yet to grasp or to develop recognition? What perceptions prevail among the experts in the discourse arena about the ‘emerging scholar’?

As I explored the contested space of scholarship as a novice, my encounter with contested paradigms left me as a researcher in a position of intellectual inadequacy, even helplessness. All along, I had this nagging question lingering in my mind, “what are students of research to do in the interim before such [paradigms] debates become conclusive?” As I engaged with literature on paradigm discourse, I had hoped to get an
answer to this unsettling question. Instead, as I continued in this quest, I got to a stage of intellectual frustration, arising out of my perception of what seemed to me then, as rhetoric at the scholarly level for ontological as well as methodological hegemony (Guba & Lincoln, 2005:191).

Granted, philosophical debates on paradigms contribute significantly to academic discourse, and knowledge development. Yet, Denzin and Lincoln, (2005:8) warn that, “The field of discourse is wrought with politics such as the academic disciplinary resistances to qualitative research”. Johnson and Onwuegbuzie, (2004:17) hypothesize that even with a ‘pragmatist approach’ that seek to combine both quantitative with qualitative research, thus advocating a synchronized approach, further warn, or even see as desirable, the philosophical debates surrounding intellectual advancement. However, although hegemony remains the reason for contested paradigm space, I now acknowledge the process of ‘ongoing conversation’ in a particular specialized field as part of validation of knowledge.

However, given their scholar identity in terms of voice and discourse in academia, such rhetoric operates way above many an ordinary scholar’s reach, let alone students of research. As I reflected on the discourse on models and paradigms, my heart went out to students doing research then, who might have shelved their qualitative approach pursuits due to these transient and rather conflicting research positions. My ‘intellectual heart’ at this point resonated with Seale’s questions about intellectual uncertainty arising out of paradigm debates; He asks

What is a practicing social researcher to make of all this? How can these inconclusive debates become a resource for researchers rather than a source of frustration and negativity? (2003:174).

Although these questions are pertinent to the doctoral student, they might not readily answer these questions. Nevertheless, most significantly, how do such debates relate to the doctoral scholar identity development? Paradigm debates have an impact on the doctoral journey from various perspectives. We explore three perspectives.

Firstly, Johnson and Onwuegbuzie (2004) present one perspective about allegiance by graduate students. They claim:
…debate [between qualitative and quantitative] has been so divisive that some graduate students who graduate from educational institutions with an aspiration to gain employment in the world of academia or research are left with the impression that they have to pledge allegiance to one school of thought or the other (Johnson & Onwuegbuzie, 2004:15).

Johnson and Onwuegbuzie move the research paradigm debates to issues peripheral, but not fundamental to the research process. For example, students who allege loyalty to a school of thought might not nurture critical conscientiousness because to be conscientious might require autonomy as well as the risk to develop the capacity for divergent thinking away from the norm.

Secondly, Rhedding-Jones (2007) locates what might be significant to the development of the doctoral scholar in the supervisor-student power relationship. She argues that methodological choices are complex, sometimes seen as “politically-correct” as doctoral students make their choices, but calls to “beginning researchers [to] seriously think about who they are, and how their ontologies or ways of being might make research a richer and more connected practice” (Rhedding-Jones, 2007:209).

However, in what appears to subdue academic freedom, the author acknowledges and eloquently situates such politics of choice in her own experience as a supervisor. She notes:

…the fact that I am a Norwegian speaking Australian…[through] my access to international research cultures, I may be colonizing my Norwegian students and getting them to take up what I see as the latest methodologies (Rhedding-Jones, 2007:212).

Rhedding-Jones (2007) gives perspective to supervisor-student-power relations. Clearly, it appears that supervision that nurtures dialogue with doctoral students develops their critical conscientiousness. In this way, students not only locate a paradigm that they can comfortable identify with, but also one that allows them to emerge themselves as scholars.

The third level of significance of paradigm wars for the doctoral student is located in funding rationale for choosing a paradigm. Nespor (2006:123) further argues that paradigm debates are sometimes located outside the University community that reside.
within State agenda and other corporate bodies that fund research. These bodies too, might determine the paradigm approach used, and even sometimes seek particular results.

Therefore, the assertions from reputed scholars introduce complexity to what paradigms doctoral students choose. The issue of allegiance for future employment, supervisor control of the research process, and adherence to academic genre, together with funding as part of the paradigm agenda, makes the research process more complicated. In addition to ontological and epistemological complexities of choice, other issues arise from methodological positionality and academic authority as clearly pointed out by Rhedding-Jones (2007:212).

What is the bottom-line of such debates to my doctoral identity? It would be naïve to suggest that any research agenda might not include these issues. On the contrary, I view these issues as part of a holistic approach to research. However, for a student to develop a scholar identity that allows creativity to emerge, influence from external controls to paradigm choices and interests might not draw on the strengths of the doctoral student to own and to explore critically ideas. I argue that any paradigm originating from outside the student’s own interest might be alien as it might also encourage one to imbibe and regurgitate ‘others’ as contrasts ‘own’ perspective. Smith (1999:35-6) argues:

> …reading and interpretation present problems when we do not see ourselves in the text…one problem of being trained to read this way [excluding ourselves in text], or more correctly, of learning to read this way over many years of academic study, is that we adopt uncritically similar writing patterns.

Seeing and interpreting text from a personal rather than from another’s perspective seems to be the critical point of divergence to creativity and originality as part of the doctoral requirement. Creativity and originality remains a central expectation for doctoral students, the basis upon which they qualify (Whitelock et al, 2008). Shulman (in Boote & Beile, 2005:3) adds to these expectations, the value of discipline, publication and peer review as core to scholarship. However, can originality emerge out of hegemonic controls where ‘institutional elites ensure academics’ comply with established traditions’ as McNiff (2008:354) reiterates Bourdieu’s concern?

Smith (1999) argues that writing is sometimes a regimented process in academia, which tends to stifle voices other than those recognized in academic writing. Somerville
(2008:209-210) captures these concerns when she refers to ‘increasing hegemonic practices of research and doctoral standards’, which might hinder doctoral students’ contribution to new knowledge, but at the same time proposes an ‘ontology of post-modern emergence that emphasizes the irrational, messy and embodied process of becoming-other-to-one’s-self in research’, to create more informed researchers.

To reflect on the complexity of methodological choice, it is for such ‘students’ that Johnson and Onwuegbuzie (2004) and Rhedding-Jones (2007) refer to, that I speak for in this intellectual dialogue. Rhedding-Jones’ confession and/or assertions raise not only issues related to methodological choice, but also a whole gamut of issues related to developing critical conscientiousness in the doctoral scholar identity.

On reflection, the philosophical debate continues, (Bryman, 2007; Donmoyer, 2006:29; Denzin & Lincoln, 2005:3; Hatch, 2007:7; Johnson & Onwuegbuzie, 2004:17; Lincoln & Denzin, 2003:2; Nespor, 2006:123; Seale, 2003:174), but retrospectively, I appreciate its generative function. Aside of hegemonic agenda, it not only demonstrates the dynamism of knowledge, but also the human capacity to generate new knowledge, besides providing space for ‘on-going’ conversation among specialists. Paradoxically, the controversy derived the mixed method approach (Johnson & Onwuegbuzie, 2004:15), besides ‘purifying’ the qualitative approach to research. Further, it highlighted the weaknesses inherent in the quantitative approach, while cautioning about the areas to be wary in the former (Lincoln & Denzin, 2003:8; Creswell, 2002:49-50).


Therefore, for students of research such as at the doctoral level, it might present a challenge to aspire to contribute to knowledge, through critical thinking as a process towards intellectual maturity, while being cautious to meet the standards for academic
qualification, in addition to other motives, such as funding. To confront all these choices, while retaining intellectual autonomy and freedom, consciously or otherwise, might restrain graduate students’ intellectual exploration, as some thoughts or issues might be outside the domain of ‘the current’.

I submit that students’ overall intellectual growth is a process rather than a status quo but the issues that emerge from paradigm contests beg some questions. For example, some questions that remain unexplored about doctoral scholar-identity development include the following: Given their positionality in terms of voice and emergent [self] interests, then, can graduate students make a claim of ‘being who they are’? Can they claim a substantive contribution to ontology from what they bring along to research? Do they even always have an ontological position in the first place? ‘Do students of research really have a voice in scholarship?’

In addition, some questions beg perspective: Whose knowledge is it that we generate? Who generates knowledge? For what/whom do we generate knowledge? Edward Said (in Smith, 1999:37), reiterates these questions in relation to writing. Smith (1999:173) asks several of research-related questions to counter the basic belief that anybody ‘has an inherent right to knowledge and truth’. Conceived from their value in developing a critical consciousness in the doctoral student, these questions are not just rhetoric, but become problematic when considered within the paradigm wars vis-à-vis the doctoral creative process. They raise issues that require reflection, as there might be contradicting demands for doctoral students as already pointed out by Holliday (2007:117).

Reflecting on the questions raised, for the moment, I might not have answers to these nagging self-introspective questions, but we know that probably most doctoral students, who are yet to earn their own authority and voice in scholarship, might have to work with, and negotiate voice and positionality in the interim. They need the space to engage as they emerge themselves as scholars.

My heightened critical conscientiousness evolved because of the Faculty’s quality assurance sessions. In addition, an interactive postgraduate computer study centre gave space to exchange ideas among fellow students, and to think deeply of academia issues. More significantly, I attribute this consciousness to quality supervision, which embraced
a ‘let go’ approach for me to embrace guided autonomy. This emancipated my thinking, as it nurtured my intellectual growth. This section of the thesis would not exist had my tensions been shared with non-supportive superiors. Therefore, it appears to me that nurturing scholarship among doctoral students hinges on such support, without which superfluous knowledge might be encouraged at the expense of creativity and originality.

For me in this doctoral journey, most importantly, as I lay the intellectual quest to rest, we appreciate the critical consciousness it has heightened in me as an emerging scholar, but humbly turn to answer questions that are more pressing. As I explore my research questions, I locate my epistemological, ontological and methodological framework in the constructivist paradigm.

The kind of research questions and the specific contexts, from where I wanted to get answers to my research questions fitted well with constructivism (Creswell, 2007:211-12; Lincoln & Guba, in Guba & Lincoln, 2005:205; Maxwell, 2005:79). In particular, the characteristics of qualitative research appeared to support my adoption of the constructivist approach to my research questions (Bogdan & Biklen, 2007:4-8; Bryman, 2004:279-287; Creswell, 2007:38-39). In the next section, I explore and locate my research topic in the constructivist paradigm to clarify my research decisions (Hatch, 2007:225).

3.2.4 EMBRACING THE CONSTRUCTIVIST PARADIGM

In this section, I define the constructivist paradigm and discuss its nature and principles, before locating my study in it. In so doing, I acknowledge that all lenses profoundly affect the process of data generation, data analysis and interpretation. I wrap up the discussion in this section with a synthesis of issues discussed, before presenting a way forward to the next section.

Schwandt (1998) proposes that constructivists seek to understand the world of the research participants. To achieve this, first I took a naturalistic approach to generate data, through observations of teachers and children in each of the schools participating in the study. Secondly, I present data by using words and pictures, rather than numbers, to describe and represent teachers and children’s educational experiences. Thirdly, one-on-one interviews and observations elicited preschool teachers’ beliefs of children’s
educational practices within a DAP framework. Through a co-created process, I empowered participants to discuss issues related to the study in order to get their subjective views (Fontana & Frey, 2005:696; Schostak, 2006). The latter asserts about the interview:

…with every view directed by a subject towards another, there is an inter-view, a space between views…the interview in this sense, is a constructive and deconstructive of cases not as single instances, nor as bounded systems, but infinitely extensible, richly connectable plays or weaving of ever expanding horizons of differences (Schostak, 2006:22).

Through such an interchange of views, I endeavoured to understand the lived experiences of the participants (Creswell, 2002:525), to get answers to questions of meaning, experience, and social significance further supported by Clandinin and Connelly (2000:71,187). Bogdan and Biklen (2007:43) emphasize the goal of qualitative researchers when they affirm that it “is to better understand human behaviour and experience. They seek to grasp the processes by which people construct meaning and to describe what those meanings are”.

Further, Creswell (2007) and Bogdan and Biklen (2007) affirm that the researcher is a key instrument in research decisions, heightening my recognition that the data I generated was a consequence of the questions I asked and the focus of the video camera. In summary, I also knew that my design decisions from the choice of topic, data generation, presentation and interpretation were subject to my theoretical assumptions (Bogdan & Biklen, 2007:55; Maxwell, 2005:79; Silverman, 2005:109).

Therefore, within the qualitative approach, I adopted the constructivist paradigm as my ontological, methodological, as well as epistemological lens (Rubin & Rubin, 2006:20-21; Mertz & Anfara, 2006:189; Hesse-Biber & Leavy, 2006:12; Denzin & Lincoln, 2000:19; Schwandt, 1998:222), using it to guide my research process, which underpins knowledge and knowing as socially constructed processes (Denzin & Lincoln, 2005:3; Denzin & Lincoln, 2000:177; Creswell, 2002:49; Crossan, 2003:52-53). In my view, the reality of how I seek to answer my research questions is inherent in my own view of the research topic, and that of my research companions. Such views have gender, class and positionality innuendos. Therefore, interpretations of existence of phenomena might
vary, depending on what individual lenses focus as interpretations of reality. This introduces fluidity to individual views of reality (Hesse-Biber & Leavy, 2006:17; Denzin & Lincoln, 2005:3; Denzin & Lincoln, 2000:177; Creswell, 2002:49; Crossan, 2003:52-53).

Consequently, I subscribe to the view that to generate data is to co-construct it in partnership with the participants, rather than to collect what might appear as already existing data (Hesse-Biber & Leavy, 2006:14). Therefore, the participants’ experiences influence the data process and data generated, to result in a situated reality that resides within personal frames of existence and experience.

By embracing a constructivist paradigm (Crossan, 2003:52-53; Bryman, 2004:279), I assumed that teachers, through personal as well as collective perceptions of the same situation (their beliefs of developmentally appropriate educational practices and children’s learning experiences), socially construct multiple realities (teachers’ beliefs and observed children’s educational experiences). As such, these social constructions influence behaviour (Denzin & Lincoln, 2000:177; 2005:3; Fraenkel & Wallen, 2006:430-433; Johnson & Christensen, 2004:33). Therefore, the constructivist paradigm steered my theoretical foundations, to explore and understand the nature of teacher beliefs, and their educational experiences with children in two different preschool curricula.

Denzin and Lincoln’s (2005:4) “bricoleur” term aptly describes my researcher position as I embraced methodological as well as theoretical bricolage to answer my research questions. By so doing, I engaged in a number of tasks such as interviewing, observation, self-reflection, and introspection in the research process. A theoretical/conceptual bricolage on the other hand facilitates scope to analyse and interpret the data using the bioecological theory (Bronfenbrenner, 1979; 2005) and the Montessori approach (Braun & Edwards, 1972:111; Gordon & Browne, 2000:15; Montessori, 1920:14-15; Torrence & Chattin-McNichols, 2005:363). In addition, the DAP framework gives depth and richness to data interpretation (Charlesworth et al.,1993; Geist & Baum, 2005:28; Goldstein, 2007:378; Klein & Chen, 2001:31; Neuman & Roskos, 2005:25; Kostelnik et al., 2004:18). Such is the scope required to answer the research questions.
Despite my constructivist lens, as I advanced through this academic journey, even after I had embraced this paradigm I still swayed towards thinking quantitatively. I have had to be conscientious, in addition to receiving a constant reminder from my supervisors to embrace the ‘new’ language, and cognitive processes characteristic of the qualitative approach and constructivist paradigm. Bogdan and Biklen’s (2007) caution resonates with my reflexivity through the research journey. They note:

…research, then as it is publicly known, is a synonym for quantitative research. Learning to do qualitative research means unlearning this social construction of ‘research’, and opening oneself to the possibility of employing a different vocabulary and ways of structuring the research process (Bogdan & Biklen, 2007:4).

I have had to be continually conscientious and reflexive (Hesse-Biber & Leavy, 2006:141) about this “new” way of doing research, an experience that admittedly, was initially difficult. This unlearning to learn that I have had to undergo is a journey I hope to accomplish when I reach my present academic destination.

In the next part of the chapter, I explore the methodological decisions for the journey, which include case study design, the data generating strategies, sampling, description of the research context, and the ethical principles embraced for the study.

3.3 THE METHODOLOGY

Silverman (2005:109) defines methodology as the “general approach to studying research topics… as your methodology shapes which methods are used and how each method is used”. It links with the basic assumptions of how ‘social reality works’ as well as the nature of research questions (Silverman, 2005:112). The strategies chosen align with the constructivist paradigm. In this section, I discuss how the case study design fits with my research and the strategies for data generation. I wrap it up with ethical considerations and limitations of the study.

3.3.1 THE CASE STUDY DESIGN

3.3.1.1 Introduction

I used a qualitative case study design because I needed to understand preschool teachers’ practical experiences within the study context, and what beliefs emerged out of
children’s educational experiences, as it relates to a DAP framework. By embracing a case study design, I concentrated on an in-depth exploration of a bounded system (Creswell, 2007:73; 2002:485; Bogdan & Biklen, 2007:59; Fraenkel & Wallen, 2006:438; Stake, 2005:444; 2000:437; Johnson & Christensen, 2004:376; Yin, 2003). Creswell (2002:58-59) defines a design as a “specific procedure for collecting, analysing and reporting research”, and Bogdan and Biklen (2007:59) view it as “a detailed examination of one setting, or one single subject or one single depository of documents or one particular event”. For Stake (2000:435; 2005:445), it is ‘a case’ to a researcher’s “interest in individual cases, not by the methods of inquiry”. The case may also be an individual, group or organization (Merkens, 2004:169). Quoting Punch, Silverman (2005:126) stresses that a case is a detailed analysis of a phenomenon in order to understand it better. My study was a detailed analysis of Montessori-trained and DICECE-trained teachers’ practices. These are among other reasons for choosing the study site, as my case in a bounded system that I elaborate in the next sections.

3.3.1.2 Fitting my study to the case study design

Flick (in Merkens, 2004:164) suggest three stages during which selection takes place: data collection, presentation and interpretation of findings. I embraced the case study through these three stages. My case study was methodological, a “type of design… an object of study, as well as a product of inquiry” (Creswell, 2007:73). Following Merriam, (in Willis, 2007:243), my study can be situated within the interpretive case study which uses data to “develop conceptual categories or to illustrate, support, or challenge theoretical assumptions held prior to data gathering”. Consequently, a case study became the choice of what I studied (the separate classrooms and individual teachers, and teachers with different qualifications) as bounded systems, rather than the way data was generated.

My research questions sought to understand teachers’ beliefs as they relate to children’s educational experiences. Consequently, the case study approach provided a fit between the research question and the design (Creswell, 2007:75). In addition, I had a current issue over which actions I could not manoeuvre (Yin, 2003:7-8), but only to try and to understand its process. The issue of accessing and sustaining engagement in the research site motivated my use of case study design (Merkens, 2004:166). Finally, the preschool systems and the schools themselves are bounded systems, suitable for case study
research. Creswell, (2007:74) suggests that a case study is appropriate if boundaries for the case are delineable. Some characteristics of the case reside within it while others are outside (Stake, 2005:444). Therefore, delimitations of a case could include a specified place, time or some geographical boundaries. This latter characteristic suggests that a case has a contextual location in a social, political and other contexts, sometimes assuming that the case’s settings affect the phenomenon under study (Creswell, 2002:485-486; Stake, 2005:200; 444; Yin 2003:13).

I conducted a collective or multiple case study, or ‘case–groups’ (Merkens 2004:167), to understand and to interpret teachers’ beliefs of the children’s educational experiences, within the Bioecological systems framework (Creswell, 2007:74; 2002:485; Stake, 2000:437; 2005:445; Yin, 2003:46). The choice of the multiple-case study in a university context, with two preschool systems was motivated by the need to understand how context factors influence beliefs of developmentally appropriate educational practices for children. Each of the four preschools functions as a bounded system, consisting of children, teachers, classrooms, learning processes, and the community from which the children are drawn. In itself, the school is a sub-system with various sub-systems within itself. The teachers also are part of a school sub-system. All these different sub-systems might affect how teachers organize the learning experiences for children.

Cases selected for a multiple case study should either ‘predict similarity’ or variance, but for ‘predictable reasons’ (Yin, 2003:47; Patton, in Merkens, 2004:167) so that they ‘supplement knowledge’ (Merkens, 2004:167). For instance, the teachers certified with Montessori might provide similar learning experiences to the children. Likewise, DICECE trained teachers might provide similar experiences. In addition, children of similar ages might have similar experiences that might be different from those of another age. However, I focused on educational experiences in each of the four preschools, and the individual teachers that I observed as they interacted with the children (Bogdan & Biklen, 2007:61; Yin, 2003:22-24).

Case studies depend on multiple sources of data which include, but are not limited to documentation, direct observation, interviews, photographs and video (Creswell, 2002:486; Stake, 2005:453-4; Willis, 2007:241; Yin, 2003:84-6). Since it is desirable to use multiple sources of evidence to enhance the quality of case study research (Yin, 2003:85), I used direct-observations to capture children’s educational experiences, while
recording video and photographs to complement the observations. In addition, I carried out interviews as additional sources of evidence for my case studies.

For validity reasons, Yin (2003:53) recommends that at least two or more cases are suitable to use in a case study because data from multiple case studies gives a better analytic approach than do single case studies. Therefore, as a collective or multiple case studies, I present data that can give the reader the flexibility to compare Montessori and DICECE educational practices and teacher beliefs at the practical level. Moreover, data from the four settings provide a deeper understanding of how teachers and children of different ages relate with each other.

However, using a case study design can pose a challenge because each case might be unique and so threaten the focus of the research. For example, in my study Belinda engaged children in free-play, while her colleagues used teacher-directed methods. In the following section, I address the issue of generalizability of this study.

3.3.1.3 The value of my case to knowledge

Stake (2005:443) recommends that a case should “optimize understanding of the case rather than generalize beyond it”. Case study research provides a deeper understanding of phenomenon of study in the particular context, as it also contributes to theoretical advancement (Stake 2000:435; Yin, 2003:1). Therefore, it has a potential to inform theory rather than to generalize to a given population (Stake, 2005:443; Yin, 2003:37-8). Consequently, theoretical sampling which “makes some cases more sensible and meaningful than others” (Mason, in Silverman, 2005:131) motivates my choice of case. In addition, Stake (2005:454-455) argues that case study adds value in two important ways:

1) Through a thick description of context, a researcher transposes the reader to the research context, making ‘vicarious’ experiences possible through a written text.

2) By interpreting the written text, the readers might identify experiences similar to their own or others previously known.
Therefore, I attempt through a thick descriptive text, to transpose my reader to the research context. I hope that through decoding the text, the reader can ‘be there’ as well as identify with some of the experiences reported in the study. In this way, the study will not only be useful to contextualise, but might provide a basis of comparison with other contexts as well. In conclusion, Silverman correctly advises about generalizability, that:

… there is usually no need to be defensive about the claims of qualitative research… the crucial issue here seems to be thinking through ones theoretical priorities. Providing you have done that and can demonstrate a research design driven by those priorities, nobody should have cause for complaint…the secret is to substitute theoretical cogency for statistical language of quantitative research (2005:134-6).

Besides there is need to replace generalizability with extrapolation as the new language of qualitative research (Alasuutari, in Silverman, 2005:136).

3.3.1.4 Summary of case study

In summary, I designed a qualitative multiple case study to explore preschool teacher’s beliefs of developmentally appropriate educational practices. By using a multiple case study design, I explored these teachers’ practices first in their daily interactions with children, before I interviewed them to explore their emerging beliefs from children’s educational experiences. I will describe the study context in more detail in the next section.

It starts with the point of disequilibrium, which disturbed my prior knowledge of the research approaches, and led me to a library search journey, in which I came face-to-face with the paradigm controversies. Rather than resolving my dis-equilibrated state, I had more questions than answers available. My continued quest for answers took me down an avenue of methodological, ontological and epistemological dimensions, as the three sites of contention. The controversy and subsequent clarity, which I got after visiting these sites, clarified my dis-equilibrated state. I was ready to adopt a qualitative approach using data-generating strategies, such as the interview and observation, guided by the constructivist paradigm. I turn to these in the next section. Figure 5 (below) gives a summary of the study design.
FIGURE 5: A summary of my paradigm search

3.3.2 THE STUDY CONTEXT: AN OVERVIEW

3.3.2.1 Introduction

This section of the chapter describes my research participants, the sites that I visited and the description of the study sites. In my attempt to keep my sites and participants anonymous, I assign each of them a pseudonym. Therefore, for purposes of anonymity where possible, I used pseudonyms for the study sites and the participants. To understand and interpret the study findings, I present details about the study participants and the study site.
3.3.2.2 A brief description of the study context

I conducted the research in two different learning preschools systems that offer Montessori and DICECE curriculum located inside a rural University in the Western region of Kenya. The University is located within a rural Division (a socio-political administrative unit) in one of the Districts in Kenya, a relatively isolated catchment-area, about 40km away from one of the main towns in Kenya. The District itself has Montessori and DICECE curricula learning centres. The Division in which the preschools are located serves a diverse population, hence different tribal groupings, with cultural variations and values.

The schools enrol children from diverse cultural, economic and social settings, both from the university community and immediate neighbouring community, sometimes from as far off as 20kms away. Therefore, the children’s backgrounds represent a diverse social, economic and cultural profile drawn from business, academic and agriculturally-oriented communities. Although the preschools are within the university compound, none of them serves as a model school that researchers in academia use to test out theory in practice. Rather, these are two preschools, started out of a basic need to prepare children for primary school, with minimal learning resources available. Both schools admit children between 3 and 5 years old. *Tumaini* Montessori preschool is the name I will use to refer to the Montessori preschool and the DICECE preschool becomes *Chemichemi*.

The Montessori and DICECE curricula imply curriculum practices that reflect their philosophical principles. The latter curriculum is eclectically originated and adapted to indigenous needs. Therefore, this study focused on two different environments that ought to be conceptually different because of the certificates held by the participating teachers and the ‘label’ of the preschools. In addition, each label carries with it curriculum implications, where a teacher employed in a school fits with either Montessori or DICECE preschool systems.

The Montessori school is a private elitist school, which charges Kenya shillings (Ksh.) 9000 (about $132 - Ksh. 68=US$1) per year, as compared to the DICECE preschool to which parents pay an annual fee of Ksh.1800 (about US$ 26.5- Ksh. 68=US$1). The schools are also semi autonomous, with an elective board to supervise and independently run each of the schools. Usually, such boards mainly oversee the financial logistics and
expenses of the school, rather than become involved in the implementation of the curriculum. As is the norm, in most schools that are public, the school board delegates the daily learning management to the head teacher, who also represents his/her colleague teachers on the school board.

3.3.2.3 Sampling rationale for the study context

I selected the university context as my case study site because it offered an opportunity to learn how the context influenced the teachers use of developmentally appropriate practices in a Montessori and DICECE preschool. This is a bounded system with both Montessori and DICECE preschools. I did a stratified purposive sample (Merkens, 2004:168; Silverman, 2005:129) of the two preschool units of analysis *(the educational activities of four-year-olds and five-year-olds)*. Another stratified sample included only two teachers from each context. I then decided to exclude the DICECE four-year-old teacher in favour of a Montessori teacher in a DICECE preschool, to provide variation sampling (Creswell, 2007:75).

I chose preschools in this location as a potential ideal representative of a peri-urban centre, where competition for standard one places might be high. This setting has a relatively high population, with relatively few ‘good’ primary schools to admit all children graduating from top class from all the preschools within the catchment area. As mentioned above, some parents living outside the university community enrol their children in either of the two preschools, despite the distance, with the hope of gaining access to the only two primary schools found within the University that have consistently done well in national examinations, relative to the other schools outside this university context.

Further, the researcher is aware, as part of prior knowledge of the case (Merkens, 2004:169), that admittance to either of the only two primary schools depends on performance in the standard one admission written and oral interview. Consequently, the schools were likely to provide the researcher with the ‘ideal academised’ preschool environment, hypothesized as possibly providing contexts to assess preschool teachers’ beliefs of developmentally appropriate educational practices. The advantage of gaining access to contexts in which a phenomenon is likely to be present lends credence to selected case studies. However, my sampling decision to access preschools that prepare
children for primary school entry interview might appear as a pre-emption of the study findings. On the contrary, it heightened my sensitivity to potential prejudice, as I generated the data21.

Lastly, I needed to select a site where consent and access (Silverman, 2005:127), particularly for video use, would not be problematic. Harper (1998:29-30) acknowledges this difficulty when he warns, “the camera makes access more difficult; in some circumstances, it makes it impossible. Because photographing is much more active than observing, it certainly influences how the fieldworker is received in the field.” However, my prior relationship with some of the teacher participants and some parents made it easy for me to establish rapport for consent and access. Table 1 (below) is a summary of the cases in my study.

**TABLE 1: A summary of the cases in the study**

<table>
<thead>
<tr>
<th>Curriculum of school</th>
<th>Age of children</th>
<th>Experience of teacher participants</th>
<th>Teacher’s training</th>
<th>Justification for sample as a suitable case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montessori</td>
<td>Three-four-year-olds</td>
<td>10 years</td>
<td>Montessori</td>
<td>Theoretical</td>
</tr>
<tr>
<td>DICECE</td>
<td>Three-four-year-olds</td>
<td>2 years</td>
<td>Montessori</td>
<td>Data-information rich case/Uncharacteristic</td>
</tr>
<tr>
<td>Montessori</td>
<td>Five to five-half-year-olds</td>
<td>7 years</td>
<td>Montessori</td>
<td>Theoretical</td>
</tr>
<tr>
<td>DICECE</td>
<td>Five to five-half-year-olds</td>
<td>12 years</td>
<td>DICECE</td>
<td>Theoretical</td>
</tr>
</tbody>
</table>

### 3.3.3 TUMAINI MONTESSORI PRESCHOOL

#### 3.3.3.1 A brief background

As part of prior knowledge, the Montessori preschool started several years after the inception of the University, to address the diverse needs of a section of the university community, whose needs at the time the only operational DICECE preschool could not meet. An American professor, who had a preschool-going child at the time, started the Montessori preschool at his car park, with a teacher privately employed by the then few

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21 I discuss the constructive decisions that I took to pre-empt my bias under quality assurance in voyage four.
parents. Soon the number of children increased, necessitating the provision of more space. The preschool moved under the mandate of a board of trustees from the private garage in which it was situated to its current location, a former contractor’s site offices and residence.

As the number of children has continued to increase, the board of trustees relinquished the school’s management to the parents, under a board of governors. The parent-elected board serves for a specified duration, maybe a two-year, three-year, or even four-year term, especially if a parent still has a child in a particular school. Sometimes for a varied number of reasons, but in rare cases, parents may decide to elect a retiring parent who is still willing to continue with board service. Montessori Tumaini preschool has such a school board.

### 3.3.3.2 A brief context description

The Montessori preschool is yet to expand to have a primary school attached to it. Instead, all the children from it gain entry to one of the only two mainstream primary schools within the vicinity, one private and the other public, through a qualifying interview. It sits on its own compound of about two acres, with assorted outdoor play materials built within the barbed wire perimeter fence. Entry to the school compound is from the eastern side, through an earth road, or the main gate to the west. At the main entrance is a rusty gate, the main part permanently closed, with only a pedestrian gate open for access.

The compound has an open play area, with a neatly kept lawn. Some parts of the lawn expose some bareness in areas, such as just below the swing, an indication of frequent use. At the eastern side of the enclosed school compound is an earth road that dispenses dust directly to the rear of the building block, and it settles behind the main building whose doors are west-facing. Mainly to the southern side of the school is fixed play equipment, comprising one swing, a climbing ladder, a sliding plane and a sand pit at its lower, southeast end of the main gate. All these play equipment have a coat of mixed strips of blue, green, red and yellow paint. The swing’s vertical rails, made of metal pipes and fastened to the ground by cemented holes, are about ten-feet high. Above,

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22 A school board normally constitutes members who are parents themselves, elected by fellow serving parents at the time, usually led by the chairperson, and other management positions, including the treasurer and the secretary, among other ordinary board members.
crossing over horizontally, is another metal bar of equal diameter, on which hang two pairs of hooks. Each pair sits at equal lengths at extreme sides, against which a metal hook suspends two pairs of medium-thick rusting chains. Worn-out car tyres add to the outdoor play equipment.

The school has one long building with a coat of a cream paint on the external brick wall. A maroon coat of paint equally conceals a rather rusting iron-sheet roof whose weather-beaten epoch is only visible from the rear side of the building. From this view, part of the roof shows obvious slits of iron sheeting. Facing the main school gate is the frontage of the building, covered with artistic colourful preschool murals that conceal a rather aging brick wall. Inside the building are several rooms that serve as classrooms, an office, toilets, a makeshift kitchen and a store. Each of these individual classrooms caters for different age-groups of children, from three- to five-year olds. There are six different groups of children, two sets of each, two baby class (average three-year olds), two middle classes (average four-year olds) and two senior class (average five-year olds), the latter being also the pre-formal school class. There are six teachers, each responsible for her own class. The school committee has employed these teachers on a two-year contract on behalf of parents. They all work similar numbers of hours, often between 8.00 hrs and 15.30 hrs. None of them has an assistant teacher.

3.3.3.3 Tumaini Montessori classrooms

At Tumaini, I observed two Montessori classrooms in the study, represented by one top class (average age of five-year-olds) and middle class (average age of four-year-olds). In each of these classes, timber shelves fixed to parts of the perimeter walls displayed Montessori materials. On the walls were numerous handmade literacy-related charts, including a range of both English and Kiswahili pictures and words, ranging from the letters of the alphabet to words and sentences. Number and number-value charts covered parts of the wall. The display area was just above an adult’s eye-level. The chalkboard in the baby class displayed additional letters of the alphabet, shapes, and some two-letter words such as ‘on’, ‘ox’, or ‘is’, which the teacher rarely rubbed off during the course of my observation. The chalkboard in the senior class displayed work that was currently in progress, as the teacher rubbed it off as soon as the subject is covered.
In both classes, the children sat on baby-size working chairs and tables that they used throughout the observation period. In the baby class were dark green rubber mats, about 4ft by 2ft in size, which the teacher and the children rarely used during the data generation period. In each class, each teacher had a working table and chair. The teacher’s table was at the far-left corner behind the classroom in the senior class, while at the baby class it was at the far right-hand corner at the front, almost adjacent to the chalkboard. Apart from the displayed handmade charts and Montessori materials, there were no other learning materials in either Tumaini Montessori preschool classrooms.

3.3.4 CHEMICHEMI DICECE PRESCHOOL

3.3.4.1 A brief background

Chemichemi preschool started as part of the University’s strategic plan to provide preschool learning for children of members of staff. It started at a makeshift prefabricated structure, next to a former University motor vehicle garage, before being moved to its current location. The University, through a representative and school board elected by the parents, provides logistical management support. It has a school management board, like the Montessori preschool. The University pays the salaries of both the teachers and other support staff, although parents still have to pay a subsidized fee for other learning-related expenses. It admits not only children of members of the University staff, but also those from its catchments area.

3.3.4.2 A brief context description

Like the Montessori school, it sits on its own quiet isolated compound of about three acres, annexed off the University land by a cypress fence. The main entrance to the school is from a northern-located rear gate, which opens to a footpath lined with whitewashed stones on either side. The gate to the school is a makeshift wooden structure that does not open out freely, but requires a simultaneous lift-and-push motion to open it.

Chemichemi DICECE preschool has one permanent recently constructed L-shaped building, whose front south-facing veranda imposingly faces the children’s outdoor play field. The building is of grey bush-stones, with a maroon corrugated iron roof. At the
front of the school building, opening southwards is an open play area. At the rear of this building were emoticons, letters of the alphabet and various artworks adorning the window glass and the lower wall of the building. The school has piped water but no electricity supply. A separate prefabricated wooden structure serves as a kitchen where the children’s snacks are prepared.

Chemichemi has assorted fixed outdoor play equipment, such as one swing, one merry-go-round and one sliding plane, all covered with a fading paint of green, blue and red. All the play equipment is metal fabricated. The lawn at the front of the school is manicured, but further afield, towards the lower side, the grass is overgrown, an indication that this part might be rarely used. Along the averagely trimmed cypress edge stand two rows of impeccably lined medium grown trees that include eucalyptus, nandi flame, wattle and podo.

3.3.4.3 Chemichemi DICECE classrooms

Inside the building are several rooms that serve as classrooms, an office, toilets, and a store. Children sat on baby-size chairs and half-hexagonal tables, put together to form a full hexagon. These tables and chairs were painted red, green, and blue. There were no working mats in any of the classrooms. For their tea-break snack, the cost of which the parents met, children had a slice of bread and a cup of milk. Unlike the Tumaini Montessori School, Chemichemi DICECE preschool does not arrange for a common lunch for the children in top class (five-year-olds) who have an afternoon session in school. Instead, they bring with them a pre-packed lunch.

3.3.5 The participants in the study

The participants in this study were four teachers holding a certificate course in early childhood education (ECE). Although all four participants were female, this was coincidental because I had used a purposive sampling to target teachers of four and five-year-olds to provide insight to the problem under investigation (Creswell, 2009: 178), i.e. these children’s educational experiences and their teachers’ beliefs. Whereas three of them had trained as Montessori teachers, the fourth had trained as a DICECE preschool teacher, through an in-service course (training while teaching). They comprised preschool teachers trained in the DICECE and Montessori system, willing to have their
classrooms observed. Chemichemi DICECE preschool had teachers who had a general early childhood certificate course awarded by the NACECE, through its DICECE training centres. Except for one teacher who qualified as a Montessori but was teaching in a DICECE preschool, the rest had DICECE certifications. All of Tumaini teachers had qualified with Montessori certificates.

I chose only those teachers teaching four-year-olds and those teaching five-year-olds, to provide latitude to understand and interpret the data. In my research design I had planned to observe four teachers, two Montessori and two DICECE trained teachers, teaching these classes, respectively. However, due to the presence of a possible information-rich case\(^{23}\), or what I might consider uncharacteristic of the general sampling decision frame, I thought it appropriate to include her in the study. Therefore, since each school had two classes of each, I focused on those participants who I thought were information-rich (Creswell, 2002:193-194). Consequently, I chose the teachers for actual classroom observations based on initial inconsistency, namely the Montessori-trained teacher teaching in a DICECE preschool, their willingness and especially their availability to participate in the follow-up interviews.

I also determined the sample by teacher qualification, willingness to participate, and age of group of children, for an information-rich ‘convenient’ sample (Wellington, 2000:62). To the extent possible, all the teachers had similar educational backgrounds and qualifications\(^{24}\) (all the four teachers had a certificate qualification in child development). To ease my entry into the classes during video observations, I sampled four teachers with whom I had previously associated. Subsequently, I chose only two from each setting. All teachers were willing to participate. Some of those left out, even requested\(^{25}\) to be included in the research, even though I had completed my sampling decisions. Table 2 (below) is a summary of the characteristics of the participants.

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\(^{23}\) Montessori trained teacher teaching in a DICECE preschool.

\(^{24}\) The table summarizes the teachers’ characteristics

\(^{25}\) I explained to these teachers whom I had not chosen about the need to limit my study sample to only those teachers teaching four-year-olds and five-year-olds, since both of the teachers who requested to be included taught three-year-olds.
### PARTICIPANT/ CODE

<table>
<thead>
<tr>
<th>ENID MONTOP</th>
<th>STELLA MONMID</th>
<th>BELINDA DICMID</th>
<th>LENORA DICTOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>28 years</td>
<td>40 years</td>
<td>25 years</td>
</tr>
<tr>
<td>Gender</td>
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<td>Female</td>
<td>Female</td>
</tr>
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<td>Educational background</td>
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<td>KCSE certificate</td>
<td>KCSE certificate</td>
</tr>
<tr>
<td>Preschool professional qualification</td>
<td>Two year Montessori Certificate Course</td>
<td>Two year Montessori Certificate Course</td>
<td>Two year Montessori Certificate Course</td>
</tr>
<tr>
<td>Total teaching experience after training</td>
<td>7 years</td>
<td>10 years</td>
<td>2 years</td>
</tr>
<tr>
<td>Duration in the same school</td>
<td>9 years</td>
<td>8 years</td>
<td>2 years</td>
</tr>
<tr>
<td>Type of curriculum</td>
<td>Montessori</td>
<td>Montessori</td>
<td>DICECE</td>
</tr>
<tr>
<td>Type of institution</td>
<td>Public private</td>
<td>Public private</td>
<td>Semi-private</td>
</tr>
<tr>
<td>Level of children</td>
<td>Top class (five-year-olds)</td>
<td>Baby class (four-year-olds)</td>
<td>Baby class (four-year-olds)</td>
</tr>
</tbody>
</table>

### 3.3.6 THE SCOPE AND DELIMITATION OF THE STUDY

I concede that studying preschool educational experiences as a challenging endeavour requires me to delimit the scope (Morse & Richards, 2002:67). I explored how preschool teachers’ practical experiences framed their understanding and interpretation of developmentally appropriate educational practices, within both indoor structured and unstructured children’s educational experiences. Although the focus is not on the teachers training but rather on children’s educational experiences, I chose to focus on DICECE and Montessori preschool teachers and their classrooms, to explore and to understand the educational experiences that they designed for the children. Although an explicit comparative analysis is beyond the scope of the data analysis, it enlarges the scope of interpretation and understanding on a developmental level, as part of rich-data provision (Morse & Richards, 2002:67). In this way, the reader might be empowered to interpret the data in a more diverse way. In addition, to gain an intra-setting and intra-age appreciation, I chose to observe how four-year-olds and five-year-olds educational experience might compare. Hence to delimit the research, I focused on teacher certification, curriculum, age of children and their educational experiences, and emerging teachers’ beliefs.
3.4 DATA GENERATING STRATEGIES

This section gives a brief description of the data generating strategies for this study. These include three strategies, observation through video recording, photographs and interviews (Bogdan & Biklen, 2007:91, 103, 113; Creswell, 2007:129; Morse & Richards, 2002:91-92; Rhedding-Jones, 2007:214), in line with recommendations for multiple sources of data in case study research (Creswell, 2007:75). During the first phase, I observed the teachers in their classrooms where I captured the video clips and photographs, to use for video- and photo-elicited one-on-one interviews in the second stage.

3.4.1 CLASSROOM OBSERVATIONS

In this section, I discuss the nature of observations used, some advantages, and how I mitigated the weaknesses inherent in observations. I explain the details of the observations and some of the challenges that I faced during the observation period. In line with case study research, I also provide thick description of the contexts in the subsequent sections. For additional information about the characteristics of the study context (Yin, 2003:93), refer to sections 3.3.4 and 3.3.5.

3.4.1.1 The nature of observations

The use of observation in research has its roots in ethnography. In the past, observed data enjoyed perceived objectivity. However, the current view to which I subscribe embraces some subjectivity in the observation process. Since observation is a complex process involving human participants, objective reality is not feasible due to views rooted in gender, class, ethnicity and positionality, inter alia, in the research process (Angrosino, 2005:729-731). Currently, the observation is a process towards insight into issues, and a ‘dialogue’ or negotiated positions, rather than a ‘method’ to generate data (Angrosino & de Pérez, 2000; Angrosino, 2005:730-732; Patton, 2002:267).

I did direct observations or non-participant semi-structured naturalistic observations as I recorded the actual children’s educational experiences that are considered more accessible through this method (Angrosino, 2005:729; Creswell, 2007:139; Yin, 2003:92). By using ‘sensitizing concepts’ (Patton, 2002:279), such as ‘educational
experiences’, I was able to focus the study in a semi-structured approach, without making the whole process rigid (Cohen et al., 2007:397).

I chose the observation method because of the advantages linked to it, which include the opportunity to understand the context of behaviour, discovery of things taken for granted, and the ability to learn things that people would be unwilling to talk about, in addition to being reflexive in data presentation and interpretation (Patton, 2002:262-4). Through sensual experiences, I gathered a range of data that included the physical setting, human setting, interaction contexts, and programme setting, all of which are pertinent in understanding the research focus (Cohen et al., 2007:397; Patton, 2002:264). Besides, I describe the setting details to give the reader a ‘vicarious experience’ of children’s educational experiences (Patton, 2002:260).

In each of these classes, except among the DICECE five-year-olds, where I spent only three days, I spent six days of between three-to-four hours per day, observing educational practices on an intermittent basis, capturing them on video. In three-out-of-four classes I observed, I spent an average of eighteen hours per class, with an average of nine hours among the DICECE five-year olds, for logistical reasons I could not overcome. In each of the three classes, out of the average eighteen hours of observation, I recorded six hours on video, while in the latter class I recorded three hours on video in line with my plan. Although the video data from the DICECE five-year-olds class might be much less, it was sufficient to get a general sense of children’s educational experiences, as it was also sufficient for video- and photo-elicitation.

3.4.1.2 The structure of coverage

As part of systematic sampling of targeted units (Cohen et al., 2007:259; Creswell, 2007:139) of children’s educational experiences, I had envisioned dividing the class into four zones - north, south, east and west - with the assumption that a range of activities took place at any given time in a class. I had structured the target behaviours on three premised random levels; a teacher-child, child-child, and child- object-interaction, or ‘molar behaviours’, as evidence of study constructs (Cohen et al., 2007:407) on a time sampling runs of one minute per target event as part of targeting specific behaviour (Angrosino, 2005:732-3). I assumed that within one minute it would be possible for a child to have engaged meaningfully with other children and with materials. I thought this
period would be sufficient for me to record target behaviour (Cohen et al., 2007:259). Within intervals of one minute for target behaviours, I would pay attention, alternately shifting focus from the child to the teacher and to the objects, recording the level of engagement for the particular activity-taking place in class.

However, in most cases during the actual observations, I realized that I had assumed an ideal interactive set-up. In reality, what existed were mostly group activities, which did not involve the three interactive levels that I had presumed prior to the study. Moreover, poor lighting in the Tumaini Montessori four-year-old class made it problematic to capture clear video data in this class. This was because all the time the camera focus was directly opposite a window, thereby inhibiting clarity of focus. Nonetheless, this zoning worked for some sessions, while it was not practical in other sessions. Where possible, I applied this zoning strategy to ensure coverage. In the event of a significant event occurring in any other zone in class, not currently in focus, I remained as flexible as possible during the observation period to capture any such events. Initially, I had planned to cover three observations of one hour in each session spread through morning, mid-morning, and late-morning sessions per class, to capture varying levels of activity. However, due to both logistics and limitations based on the nature of activity, I was able to cover only three sessions of half-an-hour each, while in some classes I covered only two such sessions, as contingent issues arose (Bogdan & Biklen, 2007:68; Creswell, 2007:134).

Despite the variable number of video records per class, I was still present in each of these classes to take supplementary observation notes; therefore, I did not find such variability a limitation to my study, and I felt I had reached data saturation by the end of the study (Bogdan & Biklen, 2007:69). Consequently, in any one day, although my recorded observations lasted for between one-hour and one-and–half-hours, my actual presence in each classroom spanned between three and four hours. Patton (2002:275) recommends that, “fieldwork should last long enough to get the job done-to answer the research questions being asked and to fulfil the purpose of the study”. I knew the data was sufficient to answer the research questions, because I had video-clips and photographs captured over a two-week, average 18 hours per class period. This I thought was sufficient to portray children’s educational experiences, upon which I would elicit teachers’ beliefs through visual elicitation.
3.4.1.3 Mitigating the weaknesses of observations

I identify some weaknesses associated with observations that might undermine trustworthiness. These include participant reactivity (Shaughnessy et al., in Cohen et al., 2007:410); researcher fatigue (Cohen et al., 2007:410); expectancy effects which predispose the researcher to anticipate events based on hypothesis; the problem of inference which cannot sustain an explanation without interviews; and biased interpretations. As stated above, I subscribe to the current view that subjectivity is inherent to observation (Cohen et al., 2007). Therefore, I suggest the mitigations of the weaknesses.

The group approach to children’s educational experiences used by the teachers resolved the problem of selective attention, since I needed not to be consistently selective in the focus. I had a predetermined structured approach for rotational shift coverage. Moreover, I endeavoured to conduct discreet observations where possible, to yield results from approximate naturally occurring children’s educational experiences (Cohen et al., 2007:410-411; Creswell, 2002:200-210; Yin, 2003:92-3). However, being reflexive about the impact of my presence in the classrooms, it might have influenced the teachers’ interactions with the children, although I tried to be as unobtrusive as possible by remaining at the back of the classroom.

Prolonged engagement in the study context might have helped to reduce social desirability and response set. To reduce the effects of observer presence on the participants, and to habituate the participants to my presence, I made multiple observations. In addition, I also took time to establish rapport and trust before the start of the data collection, by interacting with the teachers freely and playing with the children during their break time in outdoor free play, as a way of systematically desensitizing them to my future presence (Creswell, 2002:201; Rolfe, 2001:230). Finally, I triangulated the data with photographs and video recording to reduce observer bias and fatigue. Visual-elicited interviews ensured that inferences and interpretations of observed behaviours are located in participant perspectives, as discussed in the following section.

3.4.2 Visual elicitation as a method

When words become unclear, I shall focus with photographs. When images become inadequate, I shall be content with silence (Anselm Adams).
In this section, I define and discuss visual elicitation as a strategy for data generation, to include both photo-elicitation and video elicitation, before I present a brief discussion of how I used it in my study. I justify the use of visual elicitation in this study, before I end the session with some concluding remarks on photo-elicitation. In the second part, I reflect on the potential meaning of video capture in my data generation.

### 3.4.2.1 An overview of visual methods

The use of visual methods in research in other fields, which include education, has its origins in ethnography, anthropology and sociology (Harper, 2005:757; 2004:232; 2002:14-15; Pink, 2004:392). Visual research conveys information about a context, process, event or people, beyond which no number of words can describe (Harper, 2005:748; 2002:22-3; Pink, 2004:395; Prosser & Schwartz, 1998:116). The detail in a photo’s context brings to life details missed by other modes of communication, making it superior in presenting a vivid experience to anyone who might not have been there. Rose (2001:6) reiterates the prevalence of visual representation in the present society.

Harper defines photo-elicitation as the process of inserting a photograph into a research interview (Harper, 2002:13). In this way, the researcher aims to stimulate and capture the subjective view of the participants in relation to the study topic (Creswell 2007:129; Harper, 2004; 2002). I structured the elicitation process on the assumption that the teachers are more knowledgeable, hence more empowered than I am to discuss the topic, because “the power of the photo is its ability to unlock the subjectivity of those who see the image differently than the researcher” (Harper, 2004:236; Harper in Harper 2002:15). I used the photographs and video of assorted classroom activities captured during the observations, to elicit teachers’ interpretation of developmentally appropriate practices through qualitative interviewing. While it is true that photographs and video relay some elements of truth, there are other subjective or technical realities in the construction of the images. These include not only the research paradigm guiding the choices of photographs to capture, the interpretations of the image, but also the camera’s technical qualities (Adelman, 1998:148; Harper, 2005; 2004:233-4; 2002:13; 1998).

Photographs used in research should reflect the theoretical framework and assumptions of the study, besides the research questions (Prosser & Schwartz, 1998:116-7). I used the images to confirm and develop an existing theory, in order to enhance the viability of
photo-elicitation in my research (Harper, 2004:236). Photographs become ‘intellectually dense’ when captured and juxtaposed within a theoretical and methodological framework (Becker, in Harper, 1998:29; Prosser & Schwartz, 1998:115). In conclusion, I used both video and a photo-elicitation to capture the participants’ rationale for chosen learning experiences, as well as the teachers’ subjective meanings of the experiences, to understand their beliefs of developmentally appropriate educational practices.

3.4.2.2 The meaning of the video camera in data generation

Video photography recording is increasingly gaining popularity in observations and it is possible to use these without undue interruptions (Patton, 2002:308). However, Pink (2004:393) warns that the size and meaning of visual tools can influence the data generated. Some of the considerations for use of video include sensitivity to the cultural context, appropriateness of the equipment and the privacy of the study participants. The feasibility is also another consideration. In my case, I had made a reconnaissance of the possibility of engaging these methods prior to the study in both preschools. At the Montessori preschool, the school had electricity, while the DICECE preschool had no electricity connected to the school. This had implications for the use of video in data generation.

As a University community, I assumed that the video camera was an accepted feature and formed part of the lived experiences of both the children and the teachers in the study context. Some elite parents capture video sessions of their school-going children during their birthday celebration. In addition, video cameras are currently part of weddings and other public ceremonies, most of which children attend in this part of the world. Based on this cultural observation, I assumed that my use of the video camera might not have elicited too much anxiety to either the children or the teachers, and certainly not to a level of disrupting behaviour. This assumption, however, did not negate the possibility of a degree of influence of the presence of the video camera.

I also used a hand-size digital camcorder that captured both video and photographic data, to reduce intrusion (Pink, 2004:298). It was felt this might have elicited less anxiety, with the possibility of capturing naturally occurring situations. It was evident from most of the video observations that my presence as the ‘intruder’ in their class did not distract the children or the teachers. However, in one of the classes, especially the baby classes,
children were slightly anxious during the first days, but they eventually got accustomed to my presence with time, as the distraction got to ‘extinction time’ (Bogdan & Biklen, 2007:113).

In the example cited, the video seemed to distract the children from what they were doing. The children would seek attention, if they saw me look their way, as I focused the camera on them, even trying to talk with me, at other times. However, I overcame this by tactfully monitoring the activity using the external LCD screen, so avoiding eye contact with the target child. Finally, the video camcorder also became my tool of rapport with the teacher participants, as I elucidate in the trustworthiness section (Bogdan & Biklen, 2007:114). I was able to play back the video footage on each day, which resulted in a more relaxed, more trusting relationships with my study participants. Overall, in my study site, the use of a video camcorder as a tool of data generation in my view assumes a prestigious role, rather than one of intrusion of privacy among the participants. Therefore, its use in this context did not elicit any mistrust or misgivings, either from the teachers or from the parents.

3.4.3 **Unstructured Qualitative Interviews**

In this section, I present my general plan of how I used the qualitative interviewing strategy to carry out the research. In addition, I provide an overview of the detailed plan of the location and nature of the interviewing process and the use of an audiotape. I conclude by wrapping up with qualitative interviews.

3.4.3.1 **Planning for the interviews**


Four female teachers participated in my study, whose willingness to do so I confirmed during the observations. Despite prior consent, before each interview, I confirmed with each of them whether they were still willing to participate (Cohen et al, 2004:362; Creswell, 2007:132). None of them declined. I made prior appointments with each teacher for the follow-up interviews (Bogdan & Biklen, 2007:103). Each preferred either an afternoon, break-time during school days or a weekend for convenience purposes,
since they would be working. The convenient venue was a makeshift office that I set up in one of the rarely busy University guesthouses or the teacher’s class if we held the interview during a working day. Both venues were convenient for two reasons; firstly, the teachers had themselves suggested the venues for proximity reasons, hence their convenient access. Secondly, the guesthouse offered a serene and quiet location, with minimal interruptions and conducive for audio recording the discussion (Creswell, 2007:133). In addition, I provided them with full information about the nature of the interview and its duration (Cohen et al., 2007:361).

Prior to each interview, I printed out several samples of photographs depicting an array of activities, which we later used as our photo-elicitation tools and set up the laptop for video viewing. In addition, I prepared the mini-tape recorder, hardly the size of my palm. I made sure there was enough battery-life to last the duration of each interview, besides ensuring that the technical details were in place. Moreover, I also watched sample video episodes and selected, based on clarity and variety, for video-elicitation process. For each case, I chose what was both unique and characteristic of the class. Before the onset of each interview, each teacher got a chance to view their own video episodes, earlier recorded in their classrooms, uninterrupted, although I gave them the freedom to operate the laptop video-play process with an external remote control. Each of these episodes lasted 30-minutes on average.

### 3.4.3.2 The nature of the interviews


> unlike in survey research, in which exactly the same questions are asked each individual, in qualitative interviews, each conversation is unique, as researchers match their questions to what each interviewee knows and is willing to share (2005:4).
Although my approach did not elicit the interviewees’ knowledge, I relied on how much the teachers were willing to share in the photo- and video-elicitation. Therefore, while retaining this participant-specific interviewing procedure, I used the three levels of questioning, namely: main questions, probes, and follow-ups (Bogdan & Biklen, 104; Rubin & Rubin, 2006:129-130). Initially, I based our discussion on each teacher’s observed practices, captured on photo and video clips, before I asked each teacher to talk, first generally about what was going on in the lesson, and the rationale behind each activity (Bogdan & Biklen, 2007:104). The interview proceeded from general to specific. As themes began to emerge, I organized my questioning to include focused questions, moving from general to specific (Bogdan & Biklen, 2007:103; Hesse-Biber & Leavy, 2006:125; Johnson, 2001:112; Rubin & Rubin, 2005:4). In the latter stages of each teacher’s individual interview, and as I began to conduct initial data analysis, I focused the comments from the video or photograph elicited, to the themes beginning to emerge. These themes were related to the developmentally appropriate framework which include teaching strategy, use of teaching materials, view of scheduling, providing for individual differences, assessment, pressure for worksheet-based tasks and their perception of free choice.

At this stage, the teacher was an equal partner with me as we co-constructed the data. As a power-sharing strategy, the teacher or I had an opportunity to choose the images to discuss, hence also determining the interview agenda. Gubrium and Holstein (2003:37) consider this a form of power-sharing collaboration to shape the meaning of the interview process, though an active participant and respondent approach. I thus avoided what Barbour and Schostak (2005:43) term ‘symbolic violence’ by acknowledging that participants had worthwhile views about their experiences to contribute to the study. This way, teachers too contributed by choosing the classroom experiences they wished to discuss (Rapley, 2004:15; Gubrium & Holstein, 2003:23). In any case, it is not possible, nor is it desirable for the interviewer to remain neutral in the interview process (Fontana & Frey, 2005:696). Moreover, by also offering to discuss these experiences with me, they constructively shaped the information they provided because interviews are by nature ‘social constructions’ (Fontana & Frey, 2005:703; Rapley, 2004:16; Gubrium & Holstein, 2003:32).
I stopped interviewing when I felt I had reached data saturation point at the point when no new information emerged from further discussions (Glaser & Strauss, in Johnson, 2001:113). In conclusion, the qualitative interviews that I used, not only gave me the leeway to explore the topic in detail, but it also gave the teachers, as collaborators, an opportunity to engage and contribute to the study objectives. In this way, they were not only partners in knowledge construction, but also, partly, the determinants of what I report as research findings. Through qualitative interviews as perhaps the only logical alternative, I accessed teachers’ beliefs of developmentally appropriate educational practices and the factors determining their choice of these practices. This insight, admittedly, might not have been possible with other methods.

3.4.3.3 The use of an audiotape

In this section, I provide a glimpse of some of the advantages and disadvantages of using an audiotape and the steps that I took to minimize these disadvantages. I discuss permission, rapport and trust as some of the issues unique to the use of an audiotape.

The use of an audiotape was valuable to me, including relief from extensive writing, ability to concentrate more, verbatim record of the interview for a subsequent valid and meaningful analysis (Bogdan & Biklen, 2007:103; Rapley, 2004:18; Johnson, 2001:111-2). Although some authors problematize the use of the audiotape, and suggest that some participants are willing to talk off-tape (Cohen et al., 2007:364; Rapley, 2004:1; Warren, 2001:92), I established sufficient rapport and trust to reduce teachers’ anxiety related to tape-recorded interviews (Bogdan and Biklen, 2007:103; Rapley, 2004:19). Before recording, by “forcing [myself] to ask” (Bogdan & Biklen, 2007:112) I received prior permission to record the interview (Creswell, 2007:112). Consequently, the use of an audiotape did not seem to elicit any mistrust, and no participants had a problem going ‘on record’ (Warren, 2001:92), after I assured them of anonymity in data presentation to use for academic purposes.

On the contrary, the use of an audiotape might have facilitated a degree of trust between the participants and myself because each of the four teachers was so eager to listen to our discussion soon after the interview sessions, that they spent another extra one-hour or more listening to their recorded tapes. Initially though, I found the teachers’ interest to listen to their interview sessions time-consuming, especially that I had to travel back
home several kilometres using a taxi (which are scarce late in the evening). However, reflexively, I seized it as an opportunity to reciprocate by giving my time to them. In addition, it presented an occasion for further rapport and trust (Cohen et al., 2007:362; Fontana & Frey, 2005:708; Willis, 2007:83). As teachers listened to these interviews, it might have empowered them to be part of the process more, as it also gave them a sense of ownership of the interview process. Therefore, I waited for my teacher-participant to finish listening to the tape, regardless of how much haste I sensed.

Listening to a replay of the interviews was only possible through an in-built speaker. Because of this, I did not share this session with the participants, all of whom used an earphone facility. All I could see were smiles and nods, an indication to me that they were interested to hear what they had shared with me. This process, to me, was also an occasion for them to clarify any issues that they might have had. After each listening, I could observe a general sense of appreciation for the shared ‘conversation’. In this way, I avoided Barbour and Schostak’s (2005:43) ‘symbolic violence’ as well as exposing the taped ‘hidden agenda’ as might appear (Kvale, in Creswell, 2007:140). Table 3 (below) is a summary of the data generation framework.

**TABLE 3: Summary of the data generating strategies**

<table>
<thead>
<tr>
<th>RESEARCH DESIGN</th>
<th>COLLECTIVE CASE STUDY</th>
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<tr>
<td>How?: Data generation instruments</td>
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<td>Where from data source</td>
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<td>Who did it</td>
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<tr>
<td>Quality: trustworthiness and authenticity (see voyage 4)</td>
<td>Triangulated with interviews &amp; peer reviews</td>
</tr>
<tr>
<td>Ethical considerations</td>
<td>Obtained written consent from teachers and parents on behalf of the children for permission to observe the learning activities</td>
</tr>
</tbody>
</table>
3.5 ETHICAL CONSIDERATIONS

Ethical principles are central to any research (Black, 1999:138; Creswell, 2002:13-14, 217-218; Schostak, 2006:53-54; Silverman, 2005:258-261). In line with the authors’ guidelines, I endeavoured to embrace ethical principles that I discuss in the following session. These are: negotiation of access, voluntary participation, informed consent, anonymity through the use of pseudonyms, confidentiality, and, right to discontinue participation, objectivity and fairness in representing divergent views.

3.5.1 NEGOTIATING ACCESS

I had permission from the Ministry of Education to conduct research in the schools (refer to addendum four), but I still had to negotiate access to the schools, through the respective head teachers of each preschool, who were the gatekeepers (Bogdan & Biklen, 2007:50; Maxwell, 2005:82; Merkens, 2004:166; Willis, 2007:241). At this point, I clarified expectations for all participating, including the choice to withdraw from the study without notice (Bogdan & Biklen, 2007:50). Therefore, through direct negotiation with both the parents and teachers participating in the study, obtaining authorization for access and ease of entry to the research site was relatively easy.

3.5.2 VOLUNTARY PARTICIPATION AND INFORMED CONSENT

Voluntary participation and informed consent guided this study (Bogdan & Biklen, 2007:48; Christians, 2005:144; Hopf, 2004:335; Rubin & Rubin, 2005:105-6; Silverman, 2005:258) and ensured that both the teachers and parents (on behalf of their children) participated intentionally. I explained to both the parents and the teachers the nature of my study, which required me to observe and capture video data in the preschool classrooms. I negotiated directly with each individual teacher and with most of the parents, for their participation, wherein they also signed consent forms (Bogdan & Biklen, 2007:48; Hesse-Biber & Leavy, 2006:98; Silverman, 2005:258). From the teachers, I needed additional assurance for their willingness to participate in the second phase during the interviews. They all accepted.

Although I had the option of approaching parents as a group, I did not do so because I wished to avoid what I perceived as group “psychological level coercion” (Bogdan & Biklen, 2007:49). Therefore, if a parent might have declined to participate, consent from
others might easily have introduced psychological pressure also to accept. I approached parents on an individual basis, each time explaining the purpose of my study that required me to observe the children (luckily, most parents were known to me and most of them dropped off their children in the morning, so I met them then). For those parents who I could not meet personally, I left the consent forms with the teacher, explaining to them how to approach the parents and that it was not mandatory for them to consent. None of the parents declined. I assured them that my observations in the classes would not ‘interrupt’ the normal schedule of the school activities. Retrospectively, by the time I made such a promise, I had not reflected on the meaning of ‘interruption’. On reflection however, although there was no physical interruption, I acknowledge that my presence may have interrupted the psychological space of both the children and the teachers, creating some anxiety, especially with my use of the video camera.

3.5.3 **CONFIDENTIALITY**

I guarantee the confidentiality of the participants by using pseudonyms (Bogdan & Biklen, 2007:50; Christians, 2005:145; Hopf, 2004:337; Rubin & Rubin, 2005:98) for the schools, teachers and children participating in the study. However, the context details might have unavoidably identifying details that I present with photographs. I also obtained consent from teachers, and from parents on behalf of children to use their visual data. Consequently, as I present the video and image data, I seek to do so sensitively. Ethical sensitivity is necessary when presenting visual information.

> Visual data [sic] should be carefully weighed-up alongside the ethical issues they raise and in relation to the discipline-specific ethical codes of conduct… [and yet] visual knowledge cannot be directly or adequately translated into written words (Pink, 2005:4).

3.5.4 **SENSITIVITY TO PARTICIPANTS**

As part of my sensitivity to my teacher participants, I arranged for the follow-up individual interviews, at a time convenient for each of them (Hesse-Biber, 2006:124). In addition, before the start of each observation, and later interview session, I still had to seek consent to audio record our conversation (Rubin & Rubin, 2005:112). I constantly

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26 Even though I have consent from the participants to use video clips and photographs, my level of heightened conscientiousness to participant sensitivity will prevail as I present these visuals.
assured them of anonymity in presenting data. None of the teachers had any objections. On the contrary, one other teacher in one of the participating schools wondered why I did not include her in the study.

3.5.5 REDUCING ANXIETY

Although I did not intend nor anticipate any harm to the participants, as a precautionary measure, I endeavoured to protect all of them from psychological and physical or social harm (Bogdan & Biklen, 2007:48; Hopf, 2004:337). Consequently, I used debriefing to ensure that the teachers were comfortable throughout the research. On an ongoing basis, I carried out debriefing sessions with the participating teachers to ensure that I gauged their feelings about the observations. For the children, I eased into the site about one month before the start of the actual observations. During the data-generation period, I created some time during the children’s break-time to play with them as part of establishing rapport and reduce the levels of anxiety they could have experienced during observations. In the report writing, I have ensured that I present issues accurately as a way of embracing ethics governing research (Christians, 2005:145). The following section highlights some of the limitations of this research.

3.6 LIMITATIONS OF THE CURRENT STUDY

Some limitations observed in the current research are highlighted. Firstly, since only four teachers participated, the finding and conclusions might not generalize to preschool teachers in Kenya or elsewhere, although some experiences of the study findings might resonate with certain experiences of some readers. Using more participants might give varied conclusions.

Secondly, the use of video elicitations was a strength that focused on actual lessons observed as per individual teachers. However, the method is limited because teachers perceived the discussion of their lessons as a critique rather than an information eliciting process. Future research could use visual elicitation of observed lessons of teachers other than own lessons. A focus group approach would yield a more consensual understanding of the social context dynamics. Thirdly, by focusing the interviews on particular photographs and videos during elicitation, I might have limited the teachers’ contribution.
to these particularities, missing other important aspects of the research not captured on photographs or video.

Notwithstanding the limitations identified in this section, the study has contributed to knowledge in general and preschool education in particular identified in voyage 8 (see section 8.8).

3.7 SUMMARY OF RESEARCH DESIGN

I chose the constructivist paradigm as the lens to guide the study because it fitted with my topic and the questions for which I sought answers. I used observations, interviews and video- and photo-elicitation strategies to understand preschool teachers’ beliefs of developmentally appropriate educational practices. I have attempted to discuss in detail my reflexivity throughout the research journey to provide a lens through which to provide understanding and interpret the findings. I return to the issue of reflexivity in voyage four, where I discuss quality assurance criteria for this research. Finally, since ethical considerations are pertinent to any research to demonstrate respect for the participants (Bogdan & Biklen, 2007:50), I have presented a section on the ethical adherence procedures embraced for this study. In addition, I have reflected back on the limitations of the study. Figure 6 (below) summarizes how each step in the research design relates to the main research question.
FIGURE 6: Summary of the Research design

Main research question
How do preschool teachers’ practical experiences frame their beliefs, understanding and interpretation of DAEP

Identify four preschool settings to observe children’s educational experiences
Montessori Setting
DIECECE Setting

Negotiate voluntary participation

Directly observe children in educational experiences

Observe 4- & 5-year-olds in Montessori and DICECE preschools

Use video clips and photographs to elicit teachers’ beliefs
Teacher participants
Parents on behalf of their children

Do a qualitative analysis and interpretation

Write the thesis
As my fieldwork ended, I had closely interacted with my participants, both emotionally and socially, beyond my researcher’s role. In my role as an advisor, I challenged them to consider further studies. Most of them did not seem to believe they can upgrade their certificates to the degree level. Therefore, my second role as a counsellor and motivational speaker emerged. Luckily, at present, many tertiary colleges in town offer early childhood diploma courses, from which they qualify to join a degree course. As we chatted informally, I made them realize that their dreams lay within them, only for them to explore to actualize. They also seemed to think of financial constraints of going back to school; and so entered my financial analyst-quark (I knew their gross salary). I informed and discussed with them about the school-based programs that many Universities in Kenya currently offer during school holidays, which does not require any opportunity cost from employment, except for a few realistic financial sacrifices.

Several months after my fieldwork ended, one teacher sent me this text message: “I have got many friends, but none has ever talked to me like you did to me. Saying what you feel in your heart, which others do not want to talk about [about sacrificing to upgrade to a Diploma and Degree]. You have opened my eye. May God bless you big- good night” (This teacher has since left for further studies abroad). Yet, another teacher confessed that she had always taken for granted all along what she had been teaching children. To her, the interview was like a re-invention in her profession for conscientious teaching. Yet another teacher said she was going to repair her teaching materials.

As I departed from the field, I had a feeling that it was not only the teachers who gave me their time and willingness to participate, but that I might also have given them something in return, by influencing their thinking to view their private as well as their professional future with hope and optimism as evidenced from their comments. Fieldwork was to me a rewarding experience for all of us.
Recap of voyage 3

As we explored the third leg of this very important journey,

I showed you how I got answers to the questions...

I pondered in the beginning...

Through video and audio-elicited interviews

With four teachers in a DICICE and Montessori preschool in a University location,

I also showed you how I took care of the ethical concerns in the study.

Coming up next in voyage four

We discuss the data analysis and presentation framework:

- Approach to data analysis
- Data Presentation road map
- Integrated presentation approach
- Road signs-teacher Pseudonyms
- Quality assurance of the entire journey
Further down the road in voyage number 4

R: Now it is time for an invitation to you, so that you can...

1. Know how I protected the memories of my journey experience (Data processing and storage)
2. Have a glimpse to my intellectual heart, again... (Reflexivity about qualitative data)
3. Meet my journey companions in this leg of the journey (Data presentation roadmap)
4. Have a look at the entire journey's roadmap (Objectives restated)
5. Be assured to use the right pointers for an effective journey (Quality criteria)

First, have a detailed view of the signposts... ....
4.1 AN OVERVIEW OF VOYAGE NUMBER FOUR

This voyage has six objectives, namely to:

i) Provide a preview of the data-processing and storage path

ii) Present a reflexive account through data analysis

iii) Account for how themes were derived

iv) Give point markers about how to access the data through the pseudonym participants and their classes

v) Justify how various types of data are integrated, rather use than a use case-by-case approach; and finally,

vi) Present the quality assurance details that render credibility to this research.

Figure 7 (below) summarizes the outline of the voyage.

![Figure 7: An outline of voyage four](image)

4.2 DATA PROCESSING AND STORAGE

4.2.1 INTRODUCTION

In this section, I present the data processing and storage strategy. The data were video-DVD, pictures and audiotapes. A presentation follows on the current stored form of the data, and the challenges faced during the processing of the visual data.
4.2.2 PROTECTING THE MEMORIES: DATA PROCESSING AND STORAGE

Systematic organisation and storage of data for ease of retrieval, is pertinent to data analysis (Bogdan & Biklen, 2007:159; Creswell, 2007:148; Marshall & Rossman, 2006:156; Patton, 2002:440; Schwandt, 2007:6). With the help of research assistant, I transcribed verbatim video and audio data, for storage as case files, according to the individual participants, and for later analysis and interpretation. Consequently, I stored all the data and made copies where possible (because some DVDs could not copy), and labelled each of the DVDs, audio-transcripts, photographic images and field notes according to the four teachers. In addition, I made a thematic classification of video clips from each participant’s data (Tesch, 1990:141).

It was relatively easy to process audio data. However, the processing of the video data proved complex, because of the relative novelty of the DVD camcorder that I was using, which presented some technological challenges. For example, I had to learn the new DVD writing software, ‘sonic’ that I had to use to write copies of them. Regardless, with time the technical details proved less challenging as I became familiar with the process. I had not conducted much of the data analysis prior to the end of this period, due to the enormity of the DVD video data processing that I had to do during the data generation period. Therefore, I completed the data transcription, storage and partial analysis successfully and was ready to continue with a more detailed data analysis, which I address in more detail in the following section. Figure 8 (below) presents the data storage and analysis process.

![Data Storage and Analysis Process Diagram](image-url)
4.3 THE DATA ANALYSIS PROCESS

4.3.1 A GENERAL OVERVIEW OF DATA ANALYSIS

As I settled down to continue analysing audio data, it was relatively quick for me to work through the audiotapes because they were audible. Although I found it relatively easy to analyse the audio files that I had transcribed, I required more time to familiarize myself with the audio files made by the research assistants, to get the essence of the underlying themes. I did this by repeatedly listening to the audiotapes to capture the themes. However, as I immersed myself into the data, I realized that I was not adept with qualitative analysis. In the section following, I present my reflexive journey on data analysis.

4.3.2 INSIDE THE ROUNDBABOUT OF QUALITATIVE DATA; MY REFLEXIVE JOURNEY

Delay is preferable to error (Thomas Jefferson).

In this part, I use the metaphor of a roundabout to capture my predicament during data analysis. I present my reflexive journey through the data analysis process, by offering the details of the challenges that I faced, in addition to the support and decisions made to overcome these challenges. I explain my reflexive journey through the data analysis for insight into the decisions that followed it. Such reflexivity is pertinent to data interpretation.

As I ended the fieldwork, data transcription and storage processes, I was excited that what seemed to be the most challenging phase of my study was over. However, the amount of both video and audio data processed and stored was overwhelming. What was I to do with it? I remember vividly the heightened level of uncertainty that I experienced. My foremost concern was whether I had generated the “right” data for my research questions. The more I went through the audio transcripts, the more uncertain it became. I remember discussing this with a colleague who assured me that I was on track if I had this uncertainty! Clearly, I could not continue with my analysis journey as fast as I had planned. I was reading a “road closed” sign ahead, to emphasize my metaphorical academic journey.
Therefore, for me then, it appeared that I needed a roundabout of more qualitative expertise to get me back on track. I needed some revolutions of reading more on qualitative data analysis to clarify my way forward. As I went through this roundabout, I had a choice to follow one of three paths: to change my research question, to go for more interview data, or to continue analyzing the data that I had.

At this stage, while deciding on the data analysis and interpretation approach, my quantitative inclination re-emerged. I had a strong urge to quantify, especially the video data, but this approach did not fit with the qualitative study. In addition, I found it a challenge to apply the suggestions of Creswell and Tesch (as quoted by Creswell, 2002:266), on how to analyze qualitative data. The process was not as straightforward as it seemed, therefore, I had to learn more about qualitative data analysis and consult widely.

In the midst of this reflexivity, consciously, the urge to find a way out led to my reading Creswell’s (2007:43) advice, which warns of what happens after all the data is in “…and then we engage in the perplexing and often lonely…exercise of trying to make sense of the data.” Further, acknowledging this difficulty, Bogdan and Biklen (2007:172) caution, “there, facing you is all the material you have diligently collected. An empty feeling comes over you as you ask, ‘now what do I do?’ They recommend that at such times, a researcher should take a break! However, for me, the costs related to such a break were prohibitive. Therefore, I immersed myself into this “forest” of data.

At this stage of my metaphorical research journey, I felt as though I was deeply in a jungle, miles off the main highway, entangled and buttressed by a thicket. It did not help that I was venturing into my major qualitative research for the first time. However, after one-on-one discussions with my supervisors about my predicament at this stage, their suggestions were very instrumental in leading me out of the ‘woods’. They urged me to journal my thoughts about all the internal struggles I had, as a way of clarifying my
Voyage 4: Data analysis and presentation framework

analysis path. The discussions we had clarified my thoughts. In particular, my concern about what might have appeared to be the teachers’ use of developmentally inappropriate strategies, hence their discussion of the same in the video-elicited interviews seemed to have sidetracked my focus. A paraphrased question that Irma posed became my revelation: “Rose, whose developmentally appropriate educational practices do you seek? Is it your perspective, or the teachers’ perspective?” Clearly, it was the latter, rather than a superimposed definition of DAEP that was the focus. Therefore, even from the seemingly developmentally inappropriate educational practice, teachers had their developmentally appropriate beliefs to discern.

In addition to my supervisors’ support, I read more on qualitative data analysis. Besides the discussions, Prof. Irma sent me an article on “Using thematic analysis in Psychology,” by Braun and Clark, (2006); while Dr. Carien gave me her copy of Morse and Richard’s (2002) book; Read me first, both of which assisted me through the data maze. Moreover, I also attended a research support session where we had hands-on experience to analyze dummy qualitative data facilitated by Prof. Kamper. In a paraphrased conversation with him (personal talk with Prof Kamper on 25/09/2007), he used the analogy of an effective sieve, encouraging me to be an effective sieve, reiterating that the sieving process lies with the discretion of the researcher to ‘mine’ only the data that answers the research question. He further cautioned against being sentimental by holding on to data that might be unnecessary. Using a similar analogy, Creswell (2007:153) compares the process of data reduction to that of ‘winnowing’. The consultations and wide reading equipped me for the process of conducting a qualitative analysis. I was ready to immerse myself in the data to find codes and themes.

These combined experiences that improved my knowledge of qualitative analysis empowered me to continue with the analysis process. I capture this experience in the following section, in which I present the details of how I analyzed the data and how I derived the themes that I present. In this way, I lead the reader to the sources of my themes in addition to exposing the nuances used in data analysis. Data generation and analysis were concurrent until the point of data saturation, when data analysis and interpretation commenced (Glasser & Strauss in, Johnson, 2001:113; Patton, 2002:275). Interpretation depends on the previous phases (figure 9, below).
4.3.3 ON THE DATA ANALYSIS HIGHWAY

If data would speak for themselves, analysis would not be necessary (Schwandt, 2007:6).

As mentioned, I had organized all the data according to participant categories by type of class, and the learning themes captured as the units of analysis (Bogdan & Biklen, 2007:159). To familiarize myself with all the data, I repeatedly viewed and listened to video and audio data, as suggested by Rapley (2004:27), each time adding any substantive information that I felt could enhance later analysis. I also reviewed each of the video clips that my research assistants had transcribed, adding any non-verbal details they excluded.

Consequently, I carried out data analysis for the video-recorded interactions captured through observations, photographs taken and follow-up interviews. Video data and photographs provided guidance in generating themes related to children’s educational experiences, while interview data accessed the teachers’ beliefs about developmentally appropriate educational practices in relation to the emerging themes. Using the thematically organized interview transcripts and video clips, I reduced the data into themes and sub-themes, and interpreted it through analytic memos to answer the research questions. Matt (2004:329) concludes that choice of data is already an interpretation.
4.3.4 Combined inductive and deductive approach to data analysis

Data analysis can be deductive, moving from theory to data, or inductive, moving from data to theory. Braun and Clark (2006:83-84) distinguish between the two different approaches of data analysis and the process of generating themes. In the former, a researcher identifies themes in a top-bottom approach (\textit{a priori}), while in the latter approach, themes emerge through a bottom-up process (\textit{a-posteriori}) or a grounded theory approach.

My study combines two approaches, namely, the principles of DAP (Bredekamp & Copple, 1997:10-15; Kostelnik \textit{et al}., 2004; Warner & Sower, 2005:22-23), which subsumes the Montessori principles (Braun & Edwards, 1972:111; Gordon & Browne, 2000:15; Montessori, 1920; Torrence & Chattrin-McNichols, 2005:363) and the bioecological systems theory (Bronfenbrenner, 1979; 2005). Therefore, this conceptual framework ought to have guided analysis through their \textit{pre-figured} (Creswell, 2007:152) or \textit{a priori} codes (Fontana & Frey, 2005:706).

The DAP framework, which subsumes the Montessori principles fitted with my analysis as a \textit{a priori} top-down, deductive theme analysis approach framework. Still using the top-down analysis approach, I would then extrapolate the data into a bioecological systems theory. Using the DAP model of analysis, I had planned to analyze the data to fit a DAP framework synthesized to three combined levels, namely child’s characteristic, nature of learning environment, and the nature of school-community relations (see addendum five for my initial model). Therefore, these three broad components of a DAP framework were envisaged to capture both salient and minor factors from the data that influence preschool teachers’ beliefs about children’s educational experiences. By using \textit{a priori codes}, I needed to seek instances from the data that correspond to the pre-figured codes.

However, I first had to reduce the data into themes (Braun & Clark, 2006:83-84; Cohen \textit{et al}., 2007:467-8; Creswell, 2007:148; Patton, 2002:462). Therefore, as I journeyed further along this deductive road, where I had first to identify the codes and themes from the data that fitted with the three levels of DAP already mentioned, I was concerned that I could be suppressing the data by restricting it to anecdotal instances of theory. Consequently, this approach appeared to be both rigid and anecdotal, as I would super-
impose data into the DAP framework categories (see addendum five for an illustration of my first deductive approach). While this approach has the advantage of relating data to an existing theory, it might have missed out the salient details in the data. Creswell (2007:152), including Fontana and Frey (2005:706), indeed affirm my concern that using a priori codes, or what Creswell (2007) terms pre-figured codes, could be limiting and might not reflect the views of participants.

Alternatively, the inductive path would provide a microanalysis or line-by-line approach (Strauss, 1998:58), rather than an anecdotal data analysis framework. Creswell (2007:152) recommends an inductive approach because it opens up codes, unlike a priori codes that could limit the scope of analysis. However, to embrace thematic analysis as part of the broader inductive analysis or grounded theory approach presented a challenge, especially because I was travelling a theoretical road, rather than a grounded theory one. To mitigate the negative effects of each of these two approaches, I combined both approaches. Figure 10 (below) illustrates both the inductive and deductive analyses used in the study.

![Figure 10: Inductive and deductive approaches to data analysis](image-url)

**FIGURE 10: Inductive and deductive approaches to data analysis**

I preceded deductive analysis with the inductive approach that I found more elaborate, as illustrated by section A. Part A in figure 10 illustrates my initial a priori approach, but I later thought it could suppress the data. Part B illustrates the inductive or down-up approach while part C illustrates the combined approach.
As I decided on the approach to use, I sought peer review. During such reflexive moments, as I coded data inductively, supervisor guidance and peer reviewers’ critical reading improved subsequent coding. One critical reader noted that I was already interpreting data at the first coding (see addendum six). In her view, although this was an advantage to interpretation, it could also limit the holistic view of the raw data later during interpretation. Therefore, I embraced her suggestion to use in vivo codes (Creswell, 2007:153) to assist me in further analysis (see addendum seven).

At this point, I found it easier and necessary to use colour highlights for the various themes that I thought were beginning to emerge (see addendum six showing a “messy” part of some of the in vivo codes that I identified in the process of looking for themes). The differently coloured segments indicate different constructs that I later grouped together to build themes. For example, I used highlights to segment the different themes; green for content coverage, turquoise for “planning,” yellow for “nature of the child” and purple for “pressure to perform in the interview”.

Later, as I progressed through the data analysis, I found it useful to follow the codes suggested by Bogdan and Biklen, (2007:174-177). In particular, I used their idea of ‘coding families’ as my approach to data analysis. These include setting codes, situational codes, perspective codes, process codes, event codes, strategy codes and relationship or social structure codes. This type of coding became my roadmap in many instances, but not exclusively. Apart from using these families of codes as a guideline, I used in vivo codes that I later scaled up to themes to correspond to a particular family code, such as strategy, situation or any other family code as appropriate.

Consequently, as I advanced through data analysis, I deciphered the themes on teaching strategy from such statements as: “We don’t go straight to teaching I first make them understand [through choral reading].” Scheduling was another component of teaching that emerged from my earlier theme on planning from such statements as: “So in the afternoon most of the work is the oral work is because by afternoon they [the children] are tired” (Refer to addendum eight for the process through which I scaled up codes to themes). Later, as I progressed with other teachers’ transcripts, I still coded and generated themes through the same process as the first coded script, but directly without using colours, because I had grasped the themes (see addendum eight). Each of the teachers’ interviews was unique because it related directly to video and photographs.
captured in their classes about children’s educational experiences. Subsequently, I generated themes based on the guiding objective of the use of video data, as a framework to provide a general as well as a detailed nature of how preschool teacher’s beliefs related to children’s educational experiences. Therefore, the teacher’s beliefs emerged from juxtaposing the interview with observation data consisting of photographs and video-clips as illustrated by figure 11 (below).

**Figure 11:** A summary of sources of themes derived from the data

Therefore, after the inductive analysis through mining and winnowing, I extrapolate the themes to *a priori codes* (Creswell, 2007:153; 2002:239; Marshall & Rossman,
2006:158-9). Figure 12 (below) is a summary of the DAP framework and the bioecological systems theory.

**FIGURE 12: Summary of the data analysis and interpretation framework**

The diagram illustrates the progression of the data analysis process, starting with the observation and interview data at the bottom (level one), using a grounded theory approach, data-led themes emerge at level two (the themes I present in voyage five). I then scale these themes higher to theoretical analysis at level three, as an attempt to relate these themes into existing a priori codes derived from the DAP framework. This way I contextualize the data within a general developmentally appropriate educational practices context. Further up, at level four, a *priori* codes emerging from the two perspectives are subsumed into a bioecological theory so preschool teachers’ beliefs of children’s educational experiences are understood and interpreted within the children’s and teachers’ social context.

**4.4 DATA PRESENTATION FRAMEWORK**

I seek to integrate data presentation strategies by using three main approaches: by instrument (interview or observation), by participant (individual teachers) and by
research questions (guiding the study). Since I had embraced a case study design, I intended to present the data on a case-by-case approach. However, there seemed to be similarities in the themes, so I decided to present the data integrated into the emerging themes. By using the research questions as guideposts, the data also presents thematically. In the following sections, I discuss the data analysis approach and referencing of data in detail. In addition, I justify the shift from a case study approach to a thematic approach, despite having designed my study using a case study design.

4.4.1 AN INTEGRATED APPROACH TO DATA PRESENTATION

Although I retain context details to inform the interpretation of the findings, I do not present the data using a case-by-case design as initially intended, because the emerging themes and nuances from all teachers were similar. Consequently, I present integrated rather than individual cases (Yin, 2003:111-2). Even as I present the data thematically, I seek to contextualise the data within each teacher’s experiences. I organize data conceptually around the main themes emerging from the study, as well as using all sets of data as evidence (Yin, 2003:137). In conclusion, this section has presented an overview of the general data presentation strategy. The next section presents details of how to trace the data among the participants. Figure 13 (below) summarizes the integrated presentation design.

**Figure 13: An integrated presentation structure**
4.4.2 A SYNTHESIS AND PRESENTATION OF VIDEO AND INTERVIEW DATA

This section elucidates the data presentation framework. It gives a summary of how to identify data quotes and how the various pieces of data link together. In addition, the section presents a detailed explanation of identifying both video and audio data. Throughout this section, I attempt to guide the reader towards a specific path to identifying quotes, which are referenced in the next chapter on data presentation and interpretation. Therefore, the general roadmap guides the reader to navigate and locate the referenced video and audio data with ease.

Bogdan and Biklen (2007:208) recommend that data presentation should serve the purpose intended. In my case, I seek to present data on the way preschool teachers’ practical experiences frame their beliefs, understanding and interpretation of developmentally appropriate educational practices. Morse and Richards (2002:186) recommend two ways of presenting data; firstly a top-down approach, which precedes the interpretation with the supporting quote; and secondly, a bottom-up approach, which precedes the quote with interpretation. According to these authors, the latter approach provides the researcher with a stronger grip on analysis, but one can miss the bigger picture. I seek to integrate both, where appropriate, so that I can “give credence [to my] claims about data and provide enough description to bring the situation [I am] analyzing alive” (Morse & Richards, 2002:186).

In line with the qualitative approach, I use the actual quotes and photographs to enhance a vivid presentation of the lived world of the teachers and children (Bogdan & Biklen, 2007:207-208; Morse & Richards, 2002:186). Therefore, I integrate both video and audio data to answer the research questions. In addition, I refer to video references where relevant, even extracting verbatim video transcripts where appropriate, some of which I present as addenda.

As mentioned above, I integrate data presentation of the teachers whose certifications also varied. In some cases, I provide verbatim video transcripts and related teacher’s comment in order to retain context-specificity, while allowing for a systematic presentation, analysis, and interpretation of context specific data. Because of the similarity in the conceptual themes among the four teachers participating, this approach aims at providing a more critical and context-specific approach. Consequently, each of
the particular themes and content of the quotes, in addition to the nuances, even if they appear similar at the conceptual level, might vary as I interpret. Therefore, the discussion for each theme may vary depending on a participant’s perception.

4.4.3 REFERENCE TO DATA SOURCES

The verbatim quotes are specific to each teacher participant. I assumed that each of the contexts of the four teachers was unique to the context variables, such as children’s ages and teacher certification, management expectations, parental expectations, and children’s characteristics. Although I had intended to present the data for Montessori middle (MONMID) and Montessori top class (MONTOP) within the Montessori context, and the DICECE middle class (DICMID) and DICECE top class (DICTOP) within the DICECE context, my first draft of the data chapter had themes that were repetitive because the teachers’ nuances were similar. Therefore, as mentioned, I opted for a thematic rather than a case-by-case approach, but one in which retains each teacher and context case.

Consequently, as I present the data, I support the themes with verbatim data from the interviews and reference the video and photo-related support. With reference to specific segments denoted by the symbols […], I quote the specific first two letters of the pseudonyms of the teacher’s name, interview appointment number (because I had more than one interview appointment for some teachers), and the specific line where the quote can be located. When referencing interview data, I use the first two initials of the pseudonyms of the participants. The pseudonyms of the participating teachers were as follows:

- Enid (referenced EN.), the Montessori teacher for five-year-olds; teacher
- Stella (ST.), the Montessori teacher for four-year-olds; teacher
- Lenora (LE.), the teacher for DICECE five-year-olds and
- Belinda (BE.) the DICECE teacher for four-year-olds

See figure 13 {above} for a summary of the presentation structure and figure 14 {below} for specific details). This makes it easy for the reader to locate all the data.
With reference to figure 14 (above), if I am quoting line 315 of the first appointment interview with teacher Stella, a reader sees the following [ST01:315]. Where there is more than one quote supporting an idea, one would see the following, [ST01:315; ST02:29], showing that in interview appointment one, line 315 and interview appointment two line 29, teacher Stella talked about a similar idea. On a particular day when I used more than one audiotape, a reader will come across [ST03:315-03], whereby ST03 denotes the third appointment I had with teacher Stella, line 315, denotes the verbatim quote, in tape number three, denoted by the last numbers, 03, if I used more than one tape on the particular day. In one instance, I have organized the verbatim tapes as part A and B. For example, a reader will come across [LE01A:46; 1B: 25], indicating that this quote is located on side A line 46 and side B line 25 of the first day of the interview with teacher Lenora. I generated all the segments using row numbering in a tabular form (as in row numbering in a table) to ease the tracing of quotes. I adopted this type of presentation to facilitate retracing and retrieval of quotes with ease.

Reference to video episodes uses the acronyms of the class involved, e.g. MONMID-CLIP X, represents Montessori middle class (four-year-olds), and the video clip number referenced. MONTOP represents Montessori top class (five-year-olds), followed by the video clip number series referenced. DICMID represents DICECE middle class (four-year-olds), with the reference number of clip, while DICTOP represents the DICECE top class (five-year-olds), including the video clip referenced. Figure 15 clarifies the path to identify clips.
4.4.4 RELATING DATA PRESENTATION TO RESEARCH QUESTION

To capture responses to the research questions, I organized the data to respond to the overarching research question, rather than to each one of them sequentially, except for question four, which I unpack as a separate chapter. To answer the main research question, I seek to present the belief themes derived from the interview data as I integrate them with the photographs and video clips that I captured during the observations. For each of the pieces of data referenced, I have explained how to trace the quotes. Figure 16 (below) illustrates the relationship between the data and the research questions.
4.4.5 A SUMMARY OF GENERAL PRESENTATION STRUCTURE

Figure 16 (above) illustrates a summary of the themes that I present in the next chapters. I have discussed the specific process through which I derived the themes. As mentioned, I adopted both an inductive and a priori coding to derive the themes, which are related to a DAEP constructs. These themes portray the data conceptually across participants. As discussed, the actual nuances for each sub-theme might vary among the teachers, depending on the children’s educational experiences that were the basis for the teacher nuances. Accordingly, I will present the themes on teaching strategy, use or silence of materials, scheduling, assessment and consideration for children’s experiences in that
sequence summarized in figure 17 (below). Although Matt (2004:329) warns about subordinating the reality of others to ‘theoretically derived categories,’ the inductive approach that precedes the deductive analysis ensures multiple representations of the teachers’ voices.

![Diagram](image)

**Figure 17:** Thematic presentation structure

### 4.5 A CONCLUSION ON DATA ANALYSIS AND PRESENTATION FRAMEWORK

This voyage has delved into the general and specific approach to data analysis and presentation framework, with an overview of data processing and storage. It started with a reflexive journey of the challenges presented by qualitative analysis, and the decisions taken in the process. Data analysis incorporated both an inductive and deductive approach to capture the advantages offered by a combined approach.

Although case-by-case study design presentation might have been ideal to present that data and to reflect the case study design used, the emergence of similar themes called for an integrated approach. I have also introduced the pseudonyms of the participants and contexts according to the way they will appear in the text throughout the next chapters. The presentation structure empowers the reader to navigate with greater ease the data as sources of evidence. Several addenda illustrating the process through which codes and themes emerged makes the process transparent. Therefore, the detailed data presentation strategy that I have outlined serves to identify the sources of data as an integral part of data interpretation and integrity. In the section following, I address the issue of
credibility of the research findings by addressing the quality criteria embraced in the study.

4.6 QUALITY ASSURANCE CONSIDERATIONS

4.6.1 INTRODUCTION

In this section, I discuss the criteria applicable to judging the validity of this study. Validity, ‘another word for truth’ in qualitative research gives credence to it (Seale, 1999:7; Silverman, 2005:210; Steinke, 2004:185). I do not claim to capture an absolute truth ‘out there’, but rather perceive truth as residing within personal experiences. Silverman (2005:213) correctly argues that new information might invalidate truth.

Therefore, four issues related to validity that follow in the section addresses my caution for validating this research; credibility, criticality, authenticity, and integrity (Mandle, in Creswell, 2007:206). Credibility deals with four issues that interrelate: i) the accurate interpretation of participants’ meanings; ii) criticality, which addresses the question of the depth of critical appraisal of all aspects of the research; iii) authenticity, which acknowledges the existence and presentation of many voices; and finally iv) integrity that addresses the self-critical level of the investigator. Steinke (2004:186-90) suggests three broad criteria for judging qualitative research; firstly, a description of the research process (declaration of the research process and locating a research in empirical foundation); secondly, interpretation in groups and peer debriefing; and lastly, the use of codified procedures in embracing methodological congruence. I turn to these credibility issues in the subsequent sections.

4.6.2 THE BROAD PERSPECTIVES OF QUALITY

I embrace the quality criteria from three perspectives; methodological congruence to topic, which addresses how the method used, is relevant to topic and how it adheres to the qualitative research tradition (Howe & Eisenhardt in Creswell, 2007:211-12; Steinke, 2004:187-8; Guba & Lincoln, 2005:205). The second approach to validation addresses why I privilege one interpretation over another, in addition to choosing an interpretive study (Guba & Lincoln, 2005:205; Richardson & St. Pierre, in Creswell, 2007:211-12). The third quality criteria relate to the impact of the study on the social
I live[s] of the study participants. My positionality and the way my research experience might resonate with the experiences of the reader provide additional quality criteria.

The strategies that I discuss were only aimed at minimizing subjectivity, since it is not possible, or even desirable to embrace absolute objectivity, and because by so doing some voices are repressed in text (Guba & Lincoln, 2005:209; Seale, 1999:15; 23; Matt, 2004:329). All the above general levels of validation of qualitative research are located in “honesty, depth, richness, and scope of data achieved, participants approached, triangulation and objectivity of the researcher” (Winter, in Cohen et al., 2007:133). In addition to these, Fraenkel and Wallen (2006:462-463) include peer review, documenting sources of remarks, describing context in which questions were asked and observing individuals more than once. I have discussed my positionality and reflexivity at various points during my research, in addition to a systematic approach to data treatment (Creswell, 2007:207-8).

The linear approach to discuss individual quality assurance strategies should not suggest an isolated treatment of these criteria as independent entities. In most instances, the dividing line between any two might not be clear. Rather, I do this to provide a thorough analysis of how each one of them applied to the study.

4.6.3 Positionality

The Oxford English dictionary (2009) defines ‘positionality as ‘the occupation or adoption of a particular position in relation to others, usually with reference to issues of culture, ethnicity, or gender”’. Although I did not adopt a particular fixed position concerning my study, in this section I restrict the use of the term to how my past experiences, prejudices and orientation or ‘theoretical assumptions’ (Seale, 1999:167), might have influenced my choice of topic, decisions and the interpretations of the findings. In chapter one, I juxtapose the research topic within my own experience of preschool, and that of my son, in addition to my community and professional experience. In chapter three, I indicated the reasons for the choice of constructivist paradigm (see section 3.2.4), as well as the way in which the epiphanies of reflexivity throughout the data generation and analysis stages shaped the decisions made subsequent to such reflexivity. In this way, I clarify my ‘researcher position’ and the possible impacts, on my research decisions (Creswell,
4.6.4 Reflexivity

Reflexivity is “the process of reflecting critically on the self as a researcher and the human as instrument” (Guba & Lincoln, in Guba & Lincoln, 2005:210). Throughout the study, I attempt a reflexive account of how the different selves that emerged for me as a researcher influenced the research process. These selves include: research-based self, brought self (a socially and historically created self) and the ‘created-self’ in the field (Guba & Lincoln, 2005:210). I look at how each had an impact on the decisions I made, and the relationships in the field, which led to more introspection. An “educated awareness of the consequences of particular methodological decisions during the research study, whether they relate to production of data or the choice of writing style” is requisite in qualitative research (Seale, 1999:33). In sections 4.6.4.1 and 4.6.4.2 of this chapter, I provide a reflexive account of video capturing and interviewing sessions, as moments of heightened self-awareness, not only because of the research-self, but also because of the selves arising from my ‘brought selves’ and ‘created selves’. In section 3.2, I discussed my paradigmatic stance in the ‘paradigm search journey’.

4.6.4.1 Reflexivity on capturing photo images during observations

Patton (2002:261) asserts that becoming a skilled observer requires learning to pay attention to perceptual experiences, and heightened sensitivity to being reflexive, since critical reflexivity is a resource to enter into the ‘self,’ to see how personal agenda and cultural bias might contribute to perceptions of what is observed (Patton, 2002:299). Relating cultural framing to visual images, Pink (2004:401) asserts that visual interpretation resides within a person’s cultural repertoire of experiences. Therefore, the meanings conveyed by visual images vary according to culture (Prosser & Schwartz, 1998:115; Rose, 2001:26). In this study, the interpretations of photographs and video images that I captured are limited to the context of preschool children’s indoor educational experiences. For contextual relevance and interpretation, I link the images and the video clips to the interviews, as I analyse, interpret and present data. Moreover, I also provide the educational activity relayed by the image. Consequently, the reader
ought to interpret these images within the context of the study, unless they deem fit to extrapolate meaning to other contexts.


Some authors argue that the use of electronic devices can sometimes be destructive to the attention of both the researcher and the participants (Bogdan & Biklen, 2007:113-114; Rubin & Rubin, 2005:110). However, by using discrete video or audio devices a researcher can overcome these weaknesses (Rubin & Rubin, 2005:111). Although I did not use a discrete device, I chose a small camcorder that could capture both video clips and photographic images, because having a conspicuous device might have distracted the participants more. Adelman advises:

The internal validity of the photo document entails informed selections of what to document, being systematic through reflection in the taking of photographs, whether one approves of the action being recorded, justified sampling, low reactivity of the subjects to the presence of the photographer, ‘normal printing’, no editing, argued inclusion as evidence in a research report,…whether …photo, slide, film, video (Adelman, 1998:151).

Therefore, since I was aware of this possibility of biased focusing, I structured a more systematic, rotational and continuous coverage, rather than focusing on selected activities. I was also careful to capture an array of photographic as well as video episodes to provide the context for discussion, as well as interpretation of teacher beliefs of developmentally appropriate educational practices.

As I reflected on the different roles that we had, I sensed that the teachers might have perceived me as an authoritative figure based on my teaching profession at the University and my previous role in the management, as well as a former parent in one of the schools. Although it had been more than five years since I was a parent in the
Montessori preschool, I thought it might have created an impression of ‘insider’ in that institution, and ‘outsider’ in the DICECE preschool. In my interactions, subsequently, I was self-critical throughout the study to limit my bias towards the data generated.

### 4.6.4.2 Reflexivity on the interviews

In this section, I explore the possible biases arising from interviews. I also reflect on the challenges and reflexive moments that accompanied my interviewing. My reflections of the interviews and my own role in the interview process heightened my sensitivity and prepared me to conduct the subsequent one better.

One of the inevitable challenges that I faced during my first interview with the first participant was the open, rather than pre-determined structure of my interviews with the teacher. This openness presented a challenge, especially when a teacher was talking about the photograph from a hypothetical view, rather than what she actually did during the lesson. Since we were not focusing on the ideal but rather on the actual practice, I found it a challenge to stay focused on the research goal and purpose. However, I overcame this shortcoming in the subsequent interviews with other participants and in later interviews because I had gained a structure from preceding interviews. By organizing some questions related to the episodes chosen, or images selected from preceding interviews as follow-up questions, focusing subsequent interviews was possible.

The interview is a co-constructed process, replete with linguistic as well as cultural relevance that shape meaning in discussions (Gubrium & Holstein, 2001:4). After my first interview with the first participant, as I listened to the first tape that evening, I was “missing” in the audiotape verbally, although in reality I had used nods and other non-verbal cues, to urge on the participant. Mishler (in Gubrium and Holstein, 2003:34) confirms that ‘even tokens’ such as “hm” are important in the continuity of conversations, without which discourse between the participants ceases. However, Patton (2002:352,372-373) warns that the participant might mistakenly construe such tokens as approval and relevance to the topic. Therefore, in my enthusiasm to be an active interviewer in the subsequent interview, I could have overused these “even” token responses. Although I was aware of my idiosyncratic behaviour, I continued to do so because I thought these tokens reinforced participation. In one instance, I tried to use
head nodding, but it seemed counteractive, resulting in long pauses as the participant waited for my ‘mmh approval’ before continuing with the conversation. Therefore, my attempt to eliminate these ‘even tokens’ resulted in longer than necessary pauses.

My ‘guarded’ approach to interviews might have originated from my quantitative training about interviews. Initially, overly conscious of the location of self in the interview process, I suppressed my “presence”, inhibiting my deeper exploration of the interview responses. Consequently, because of being overly conscious not to ‘contaminate’ the data (Gubrium & Holstein, 2001:13-14; Johnson, 2001:107), I might have attempted to approach the first interview with a sense of neutrality, or to see the participant as “the passive vessels of answers”, rather than use an open approach (Holstein & Gubrium, 2004:144).

Therefore, due to heightened reflexivity, in later interviews I positioned myself to co-construct meaning with the participant by asking questions without being overly conscious of how I was “contaminating the data” (Gubrium & Holstein, 2001:13-14). Holstein and Gubrium (2004:155) advise that “it is virtually impossible to free any interaction from those factors that could be construed as contaminants… participants… are involved in meaning construction, not contamination”. I have discussed my approach to reflexivity to reveal the research decisions relevant to quality assessment so that the readers can use these to make their own value judgment.

4.6.5 **THICK DESCRIPTION**

I describe in detail the ever-changing research context and the assumptions guiding the study (Creswell, 2007:209; Johnson & Christensen, 2004:362). In the research study area and participants’ section (refer to section 3.3.2-3.3.5), I describe the study setting to empower the reader to extrapolate the study findings to similar settings, to fulfil either ‘internal generalizability’ (to same setting) or ‘external generalizability’ (generalization beyond the setting) (Maxwell, 2005:115). Further, I present a detailed description of the methods and the decisions during the process of data generation (see 3.4.1 on classroom observations; 3.4.2 on visual-elicitation, and 3.4.3 on unstructured qualitative interviews), rather than focusing on outcomes. Therefore, I provide the reader with an opportunity to judge the credibility of the process and to appraise the conclusions based on the reported findings (Mehan, in Silverman, 2005:210). Creswell (2007:207)
proposes the use of term ‘validation’, rather than ‘verification’ to underscore the process over results, to judge accuracy of research findings. According to Maxwell (2005:106), it is desirable to “identify threats and to look for ways to rule them out”. Therefore, the detailed description of the strategies used to collect the data, the decisions made during this phase and that of the data analysis serves as a lens to judge quality in this study (Steinke, 2004:187), especially that of method-topic harmony (Creswell, 2007:211; Guba & Lincoln, 2005:205; Steinke, 2004:188).

4.6.6 PROLONGED ENGAGEMENT

As I observed children’s educational experiences, I was aware of bias inherent in observation in general (Cohen et al., 2007:158-9) and photography in particular (Goldstein, 2007a, b; Banks, 1998; 2001; Harper, 1998; 2002; Van Leeuwen & Jewitt, 2001; Adelman, 1998:150). Consequently, to minimize bias on the data generated, I stayed long enough in the field to build sufficient trust and to capture characteristic behaviour (Creswell, 2007:207; Maxwell, 2005:110; Steinke, 2004:188). I undertook systematic coverage in addition to other bias-reduction strategies (see section 3.4.1.3). For further trustworthiness, the video camcorder came in handy in the process. Through a mini-LCD screen, I replayed video-footage, and the still pictures to the teacher participants. Apart from confirming to me the availability of the clips, the playback of video clips also gave the teachers a review of their lessons. By seeing their interactions with the children, I noted that the teachers relaxed in the subsequent sessions. Moreover, these video-watching sessions became my moments for debriefing, allowing the teachers to ascertain their ongoing interest and to continue participating in the study. All of them participated to the end of the study.

4.6.7 TRIANGULATION

Triangulation may be defined as “the use of two or more methods of data collection, in the study of some aspect of human behaviour” (Cohen et al., 2007:141), as opposed to a single method approach, replete with limitations (Guba & Lincoln, 2005:205). Yin (2003:97) posits that more than in any other design, case studies call for multiple sources of evidence to corroborate the study conclusions (Yin, 2003:98). Therefore, I embraced methodological triangulation by using audio-recorded interviews and video-recorded observations to present a more holistic picture of the preschool teachers’
beliefs and interpretations. The availability of video, photographs records and audiotapes mitigates the weaknesses inherent in both observations and interviews (inability to remember and record everything for later analysis), but also provide analytic representations of the participants’ experiences. In particular, I captured an array of activities to represent ‘typicality’ of children’s educational experiences (Mehan, in Silverman, 2005:210). Although capturing typicality may not eliminate bias according to image-based researchers (Harper, 1998:29; Banks, 1998:16), a reflexive approach to photography might reduce it. In addition to triangulation, I embrace polyvocality and multiple representations of data under themes (see voyage 5) to justify the presence of each participant in text. In this way, I avoid what Silverman (2005:21) terms anecdotalism, by which the researcher selectively presents the data without justification for so doing. Further, I preserved these records as testimony to data collected, subject to an inquiry audit of how raw data transformed into themes and interpretations to ease “tracing back the steps” (see appendix 8, 9, 10) to the raw data. By so doing, I minimized, even though not completely, the problem of privatizing qualitative analysis of data (Bogdan & Biklen, 2007:173).

Finally, accuracy in report writing is my responsibility when presenting factual data. As part of my self-development and preparation to do the research, I continued to acquire observation as well as video- and audio-recording skills, requisite for quality research. Creswell (2007:209, 219) suggests that in a study, any two criteria might be deemed sufficient to judge its quality. In addition to these general criteria, I define my case, indicating its values and social significance. Moreover, I present a clear description of the case as I identified themes from the case. I locate my case-derived assumptions, possibilities of generalizations, and my own positioning in the research. All these criteria are basis for Creswell’s ‘good case study’. However, this being my first qualitative major project, I faced all the challenges for which I provide a reflexive account. In summary, I have discussed steps I embraced towards quality assurance during the research process. By presenting a detailed account of these, I leave it to the reader to judge the quality of such efforts in this research.

4.6.8 DEALING WITH GENERALIZABILITY

I do not seek to justify my study as generalizable to other contexts. Rather, I want to provide alternative thinking to the problem of generalizability, which I hope will extend
my case study and empower the readers to construct their own opinion. Therefore, I embrace suggestions by Stake (2005:446) and Yin (2003:53), that although generalization might not be the goal of case study research, analytic conclusions from more than a single case with varied context variable, if found to be common, might provide a firm basis for generalization.

The problem of generalisability is not limited to the case-study design, but is an issue to all qualitative research (Silverman, 2005:127). Hence, since my case study has demonstrated theoretical sampling, I may generalize its findings, if the study findings resonate with examples from other studies. Besides, a typological structuring (Stake, 2000:446-447) of the preschools into Montessori and DICECE provided further basis to view this study as theoretically sampled, since preschool curriculum philosophy sanctions a certain approach to the use of developmentally appropriate curriculum. Theoretical assumptions guide curriculum choice for four-year-olds and five-year-olds (Gordon & Browne, 2000:162). Silverman (2005:132) argues that “in focusing your research, you necessarily are making a theoretically guided choice”. In addition to the theoretical sampling guided by presumptions on the research questions, I included a possible data-rich case (Montessori teacher in a DICECE preschool) as testing ground for assumptions of the study (Mason, in Silverman, 2005:132-133).

4.6.9 SUMMARY OF THE CREDIBILITY OF THE STUDY

This section has attempted to address the credibility criteria embraced in this study. Overall, these criteria embraced the suggestions for quality criteria as recommended in qualitative research. These include positionality, reflexivity, thick description, prolonged engagement, and triangulation. The section also addressed the issue of generalizability. In the next voyage, I present the data in two voyages; voyage five covers data on children’s educational experiences and emerging teachers’ beliefs while voyage six presents the factors that influence teachers’ beliefs.
A brief sojourn after voyage four

In the past voyage, we discussed the data processing, storage, analysis and presentation framework.

We also discussed a brief of how an inductive and deductive approach became the data analysis frameworks.

As we journeyed further down the road, we came across an integrated approach to data presentation that combines both video and audio data.

And as we came to the close of this voyage, we further got a road map on how to access the details of data through a participant’s road map (teacher and school pseudonyms) and sources of evidence of what we saw (video and photographs) and what we heard (audio data).

As the end of the road signs, we saw how using the right map [credibility] ensured that we went to the right directions in our journey...

We are now ready for the next voyage, which takes us to the classrooms to hear and observe, and further down the road, we can ‘hear’ the teachers’ minds to clarify what we ‘saw’...
VOYAGE FIVE
DATA ON CHILDREN’S EDUCATIONAL EXPERIENCES

Coming up in voyage five

Themes related to practical experiences on the following DAP-related constructs:

  Teaching strategy
  Silencing / use of learning materials
  Scheduling of children’s educational experiences
  Assessment
  Consideration for children’s individuality

Come now, as we reflect, on what our eyes saw and what the ears heard,

  That we can feel and hear answers, to the questions pondered...at the start of this long journey, guiding and lighting the way
  of the present, journey...

Because in it could be other different journeys...
5.1 THE RESEARCH QUESTIONS RE-STATEd

I recall the main research question posed in voyage one:

*How do preschool teachers’ practical experiences frame their beliefs, understanding, and interpretation of developmentally appropriate educational practices?*

In addressing this question, I posed four sub-questions:

1. How do preschool teachers interpret developmentally appropriate educational practices?
2. How do preschool teachers’ interpretation of developmentally appropriate practices express in their interaction with children?
3. What are the beliefs influencing teacher perception and interpretation of developmentally appropriate practices?
4. What are some of the factors influencing such beliefs?

5.2 A GENERAL INTRODUCTION AND MIND-MAPPING

The sub-questions guide the discussion of the themes organised to respond to the main research question. Specifically, apart from question four, which I address independently in chapter six, I seek to integrate questions 1-3 in a nested approach around the themes that emerged, rather than respond to each of them sequentially (see figure 18). This chapter embeds emerging teachers’ beliefs within teachers and children’s practical experiences, as captured through interviews and observations respectively. The two methods are discussed in detail in voyage three. Therefore, rather than present children’s educational experiences separately from teachers’ beliefs, understanding, and interpretations, I juxtapose them to provide the context for the discussion of the emerging beliefs. Consequently, I present the emerging practical experiences under each of the five DAEP-related constructs, together with the interpretation and the emerging beliefs, discerned from teachers’ comments that relate to the DAP template. Figure 18 (below) illustrates a nested approach to the discussion.
Although a context-specific data presentation format could have been ideal to reflect the case study design used, a nested approach that combines both the children’s educational experiences and teachers’ emerging beliefs is adopted because the majority of the emerging themes were similar. I assumed that this was how beliefs, understanding and interpretation of children’s educational experiences could emerge from teacher nuances during the interviews. Themes are organized around five DAEP constructs, namely teaching strategy, use of materials in one class and ‘silencing’ of materials in three classes, scheduling of learning tasks, the teachers’ approaches to the assessment of children’s learning tasks, and attention given to children’s individual differences and how each theme relates to their educational experiences. (Refer to figure 19 {below} for a summary of the themes and sub-themes derived for the study).

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**FIGURE 18:** An illustration of a nested approach to address the research questions

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27 Throughout the discussion, I use the metaphor ‘silencing of materials’ to indicate that all the observed classes had materials, but only one teacher out of the four observed engaged children with them (see section 5.4.3). The metaphor of the teachers ‘silencing’ materials derives from the active process where they might have deliberately chosen not to use the materials, even though these were available in their classes.
5.3 THEME 1: TEACHING STRATEGY

Learning and teaching should not stand on opposite banks and just watch the river flow by; instead, they should embark in a journey down the water. Through an active reciprocal exchange, teaching can strengthen learning how to learn (Mallaguzi, 1998:83).

Teaching strategies “are the procedures, processes, activities and tools used to assist in learning...encompass[ing] a wide range of actions... situated across a variety of contexts” (Miller, 2008:963). This definition of teaching appears to reflect a DAP approach. Sugrue (1997:3) states that in different contexts, different terminology is used for ‘teaching’. For example, the USA and Canada use the term ‘instruction’, while Britain and Australia refer to it as ‘teaching’ (Hargreaves in Sugrue, 1997:3). However,
Sugrue (1997) identifies three elements central to the notion of teaching applicable to my discussion: “a teacher, a student and some content” which entwines with learning. MacNaughton and Williams (2004) present several teaching strategies commonly used in early childhood environments. Among these is collecting, scheduling, demonstrating, describing, encouraging, facilitation, feedback, grouping, listening, modelling, positioning and questioning. In the following discussion, therefore, I use the term ‘teaching strategy’ to refer to the totality of activities and actions experienced by the children in their classrooms, which involved some form of learning. Figure 20 (below) illustrates the two themes that emerged for teaching strategy.

**Figure 20: Sub-themes related to teaching strategy**

### 5.3.1 Definitions of sub-themes related to teaching strategy

There were a few other anecdotal strategies, such as story-reading, demonstrations and a single colouring lesson (MONMID), experience-based story telling (DICTOP), and free play (DICMID). However, the teachers mostly used *choral reading, copying and written task-based completion* on a daily basis. Free play as an exceptional theme used by Belinda will be discussed separately (see section 5.4.3). Figure 21 (below) is a description of each of these two themes discussed in this section.

<table>
<thead>
<tr>
<th>THEME ONE: TEACHING STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-Themes common to all classes</strong></td>
</tr>
<tr>
<td>Choral reading through modelling</td>
</tr>
</tbody>
</table>

---

28 See Voyage four for detailed directions for accessing data.
THEME ONE: TEACHING STRATEGY

| Copying and written task-based completion | Children copy work in their workbook, sometimes the work has already been written by the teacher in the children’s exercise books. The teacher writes something on the chalkboard or in children’s books with right or wrong answers for children to complete. |

**FIGURE 21:** Definition of teaching strategy themes

5.3.2 CHORAL READING THROUGH MODELLING

Language is a social construct…in order for language and literacy to be cultivated in young children; two essential experiences need to occur. Children need to talk with and listen to others, and they need to read with others (Seefeldt & Wasik, 2006:207).

Choral reading is an activity in which the leading child or the teacher takes a frontal position to model different learning activities, such as to identify colours, words or picture words, letters, numbers and number values, whilst shouting its identity aloud, as the rest of the children chant. MacNaughton and Williams (2004:125) define modelling as “a process through which children learn how to behave by copying (modelling) the behaviour of others”. In addition, Neisworth and Bugg (2005:193) refer to it as “presenting an example to be imitated”. Although modelling often refers to some social behaviour (Sroufe, Cooper & DeHart, 1996:18-19), in this study, I extend its use to include instances where teacher demonstrations precede opportunities for children to engage with the task alone.

Therefore, I extend the use of ‘modelling’ to include the cognitive dimension of repetitive reading of words or concepts in the ‘choral chanting’ process. Images 1-5 illustrate some of the choral activities. Neisworth and Bugg (2005:193) suggest that children copy the behaviour of models that they perceive ‘to be like them’. In addition, current neurological research suggests that modelling behaviour is not only about seeing the action, but that a person’s brain “mimics other people’s actions even if [not consciously]… especially if later performance is required, which seems to clarify the importance of observational learning” (Blakemore & Frith, 2005:463). Modelled choral activities were a common strategy used by all the teachers in this study. These included daily reading of charts displayed on the wall, writings on the chalkboard, or sandpaper
letters and wooden chips.  

Image 1 and 2 (figure 22, below) illustrate different child-led choral activities in Lenora’s and Stella’s classes respectively. By using the pointing rod (refer to image 1&4), the lead child modelled the reading behaviour to others who participated in turns. Kostelnik et al. (2004:322) emphasize the role of modelling in children’s educational experiences, that ought to include opportunities ‘that involve children’s watching others read and write, interacting with a more experienced person (teacher, parent, peer) in literary activities, and to working alone to practice skill building’. Choral activities provided role-modelling opportunities, as illustrated by images 1-6 during choral sessions.

29 (See addendum 12 for assorted choral activities and figure 22 for images that illustrate choral reading. Also, see the summary of emerging beliefs from figures 23 & 24 and addendum nine for an illustration of a choral session. Additional data of children’s educational experiences is in addendum 11.)
Teachers’ beliefs emerging from the choral activities include the development of children’s literacy to prepare children for transition to primary school, opportunities to provide variety-reading tasks and to develop confidence to approach learning tasks. In addition, through choral activities, children interact socially, as they learn from each other through modelling (figures 23 and 24 {below} illustrate the emerging themes).

<table>
<thead>
<tr>
<th>Teacher</th>
<th>(Practical experiences-Choral reading)</th>
<th>Illustration of emerging belief</th>
<th>Example of emerging belief</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Belinda’s</strong></td>
<td>Teacher picks a rod and leads children to read the letters of the alphabet and colour identification, before giving lead-children opportunity to do the same [Ref to video clip- DICMID clip 6, addendum]</td>
<td>[So like when you use A for Apple, so they see apple, there and letter A] [BE01:22]Before a child knows how to read, they just look at the picture and say but they will have known the words, they just say the words… it helps them to know how to read. [BE01:24; 112; 114; 116; 120; 122]</td>
<td>Opportunity for literacy development</td>
</tr>
<tr>
<td><strong>class</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lenora’s</strong></td>
<td>The lead child leads the children to read various charts displayed on the wall (ref images 1-12)</td>
<td>[…] Yah after reading every day until, they… they catch them well[LE01A:868; 892] [LE: Yah when we go to the written work now the children have no more problems] [LE01B:58]</td>
<td>Literacy development through repetition Smooth transition to written activities</td>
</tr>
<tr>
<td><strong>class</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 23:** Children’s choral reading educational experiences & teachers’ emerging beliefs: DICECE preschool
<table>
<thead>
<tr>
<th>Teacher</th>
<th>(Practical experiences Choral reading)</th>
<th>Illustration of emerging belief</th>
<th>Example of emerging belief</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stella’s class</strong></td>
<td>The lead child picks different items from a wooden box, showing it to the class as she/he identifies whatever she/he has picked, shouts its identity and puts aside the item.</td>
<td>[ST: Okay, I prefer [Choral reading] so I prefer for those who did not catch up immediately when I was teaching…they will get the concept through their friends [ST03:334-338-03]</td>
<td>Peer learning</td>
</tr>
</tbody>
</table>
| **Enid’s class**  | Lead child: Bread (holding out the picture card): Class: Bread  
Lead child: can you spell the word bread?  
Class: b/e/e/a/ d/-Bread;  
Class: Rain  
Lead child: can you spell the word, rain?                                                                                                                                 | If we are doing English we have to read first and they have to copy what they have read, they just have to copy it at least it helps them in reading and they will keep on remembering [EN02:107; 113; 115] | Smooth transition to written activities and acts as memory strategy during writing activities |

**FIGURE 24:** Children’s choral reading educational experiences & teachers’ emerging beliefs: Montessori preschool

From their comments (figure 23 and 24 above), Lenora and Enid appeared to emphasize their beliefs that choral reading provides for the smooth transition between reading and writing activities, as it also acts as a memory strategy for the children. They appeared to believe that as children read the words repetitively, it becomes easier for them to remember these words as they write them down in their exercise books. To reinforce their beliefs, all the teachers in this study, except Enid, who used the chalkboard daily, referred to work on it that remained unchanged for most of the study period; some for the last six years (see Lenora’s comment and image 1 and 5 as illustrations). Both Lenora and Enid, who taught in the Top classes, appeared to value work they wrote on the chalkboard as a literacy opportunity for children:

[LE: Yah after reading every day until, they… they catch them well… the words are there permanent, as I told you they have been there for the last six years][LE01A: 868; 892]

[EN: We have to read first and they have to copy what they have read, they just have to copy it at least it helps them in reading and they will keep on remembering. They read and copy it they will read, if you will just find them breaking and reading while writing; at least it helps them in reading [EN02:107; EN02:113; 115]
Therefore, teachers linked both choral reading to writing, appearing to emphasize it as an important literacy opportunity for children. Their sentiments illustrate this interpretation:

In what echoes views from other scholars, such as Yoo (2005:144), Gordon and Browne, (2000:484), and Neuman (in Seefeldt & Wasik, 2006:216), who suggest that children’s listening and speech skills are a prerequisite to their reading and writing skills development, teachers in the current study preceded children’s written activities with some choral activity. Enid’s comment summarizes the approach observed:

In what appears to express this adage, Belinda, Lenora and Enid believe that picture words enhance children’s literacy acquisition. Vignette 1 illustrates one of Belinda’s approaches to children’s educational experiences:
VIGNETTE 1: An illustration of the variety of educational experiences in Belinda’s class

To illustrate how Belinda interpreted the activities that incorporated rhymes, shapes, and choral reading of the letters of the alphabet shown in vignette 1, she said:

[BE: This one makes it look attractive; you know children like attractive things … if you just put there a number, they will have less interest with it but if there is a picture, they will look at the picture and the number] [BE 92; 94] (Reference image 5: the coloured pictures above the blackboard)

Belinda’s remarks express her believe in variety choral practices that stimulate the children’s interest. Belinda’s comment in particular captures her belief about the literacy role of visually appealing picture-words or picture numbers. Lenora further commented the following regarding the choral activity captured in vignette 2 below:

[… Yah after reading every day until, they… they catch them well] [LE01A: 868; 892]

Therefore, vignette 1 above captures Belinda’s experience and her emerging beliefs about the need for sensorial stimulation for children, while vignette 2 below illustrates another child-led typical choral session and the way children and the teacher experienced the choral process in Lenora’s class.
VIGNETTE 2: An illustration of a choral session (child-led) in Lenora’s class

“It is another day in my observations. I am very happy that it is the end of the week, as look forward to the weekend to view all the video data for the week and for a rest. Teacher Lenora looks very relaxed in my presence today. I have started writing my daily journal.

One child quickly rushes and grabs a rod that he uses to point at the objects in the choral reading activity that he is about to lead. He simply chooses a chart and goes through the words written as he shouts. Naturally, all the children follow suit and read very loudly after him.

The teacher sits at her table to start marking the homework books that the children have just handed in. She is deeply engrossed with her task, until she finishes marking all the work. Meanwhile the children go through voluntary-led rotational choral reading sessions, the only thing that they seem to do at random is their selection of charts hung on the wall and the word pictures written on the blackboard. It has been about fifty minutes since she started marking, she looks up to see what the children are doing.

Meantime the teacher has punctuated her marking with some non-specifically directed verbal remarks “some of you are not reading”. Actually, some children occasionally get distracted with my presence and look at me, but briefly.

Nuanced:

I am somewhat surprised by the children’s choice of activity. Whereas I thought the children had other options to use the locally available material stored away in a white cupboard by the wall, because of what I think constitutes free choice, they have not opted for that activity…I wonder why? It is strange that all the children seem to understand what “free choice constitutes”. As soon as the children are “freed” by the teacher, one child rushes to lead others in the choral reading activity. Others enthusiastically want to take their turn in leading…

Later… as I interviewed Lenora I seemed to get an answer to my question because she believed this is part of free choice activities. (The quote is based on the activity: [LE: they do whatever they want, mainly; us…by picking the stick one by one; reading what is on the wall; Yah, because you, I can’t just… there are no directed activities…])

Like Belinda, Lenora links choral reading to visual imagery and children’s ability to recall. From their comments, both Belinda and Lenora appear to reinforce the ideas of variety, sensorial stimulation, and the use of colour in early learning environments is valuable. To emphasize the value of visuals in memory, Blakemore and Frith (2005:463) note, “…visual imagery, of visualization, is powerful – most people can actually control their ‘mind’s eye’ and use it to have a look around the corners of their living room to count the pictures in their head”.

Although Stella did not associate words and pictures, she observed that choral reading enhances ‘children’s brain work’ or thinking [ST01:294], in what appears to illustrate her view on the cognitive benefits of choral reading to the children. Besides, she equally engaged children in a variety of choral activities as part of their educational experiences.
Therefore, these teachers believe that through picture-words or ‘picture reading’ (Seefeldt & Wasik, 2006:214) children acquire literacy skills. All the preschool classrooms in the study had a variety of multi-coloured charts and picture words consistent with the observation by Prochner et al. (2008:193), that the Indian preschool in their study had similar educational posters. By engaging children in multicoloured charts, the teachers appeared to embrace this *multisensory stimulation* principle.

Kostelnik et al., (2004:74) underline the need for children to have firsthand sensorial stimulation; as “all learning begins with perception; seeing, hearing, touching, tasting and smelling. According to the developmentally appropriate template, children learn best through engaging all their senses” (Blakemore & Frith, 2005:461; Bredekamp & Copple, 1997:125; Broadhead, 2001:34; Crowther & Wellhousen, 2004:185; Montessori, 1899:23).

Environmental print enhances children’s literacy (Beaty, 1996:125; Gordon & Browne, 2000:481; Kostelnik et al., 2004:311; Seefeldt & Wasik, 2006:211). Therefore, the positive effects of sensorial stimulation, as emphasized by vignette 1 and 2 from Lenora’s and Belinda’s classes, reflect the recommendation for an early childhood environment that stimulates children’s interest to learn (Blakemore & Frith, 2005:461; Bredekamp & Copple, 1997:125; Broadhead, 2001:34; Crowther & Wellhousen, 2004:185; Montessori, 1899:23). In addition, the emotional effect of colour on the children’s activity level and teaching objectives is important to their emotional responses. Crowther and Wellhousen write:

> Colour can elicit both a learnt and behavioural response. Therefore, children’s educational experiences that engage them with variety and a colourful environment are important. Bright primary colours stimulate and excite, while pale warm colours have a calming soothing and relaxing effect (2004:31-2).

Consequently, teachers embraced a ‘multi-sensory’ principle by engaging children with charts (see addendum 12). However, apart from colourful picture words and number charts that varied the *reading* activities in the learning environment, Belinda used rhymes, songs and free play in little variations.\(^{30}\)

\(^{30}\) Belinda was the only teacher who facilitated free play on a daily basis; hence her unique approach which set her apart from the rest of the teachers is discussed under section 5.4.3.
5.3.2.2 Choral reading provides children opportunity to develop confidence

Apart from the educational benefits of choral reading, from their sentiments, the teachers believed that choral reading also has social benefits for the children. Enid’s sentiments illustrate the view that through choral reading (especially frontal choral reading) children develop confidence and a positive self-esteem to approach learning tasks. Belinda and Stella linked choral reading to opportunities for peer interaction and learning. Their comments corroborate this interpretation:

Teachers believed choral reading provides children with differential abilities to learn from each other as they interact. The teachers’ beliefs about choral reading as an opportunity for children to develop literacy skills in a social environment echo Katz’s (1995:113) view that learners need to feel good about their learning, and experience acceptance, competence and feedback from both teachers and peers. In addition, Sandberg and Eriksson (2008:5) note that children experience a sense of belonging and high self-esteem when they participate in their learning. Therefore, as participants either as ‘chant-leaders’ or respondents in the chanting, children have experienced a sense of belonging and peer affirmation, as members of a learning community.

Spodek and Saracho (in Saracho & Spodek, 2003:180), referring to their earlier works, recommend strategies that enhance children’s literacy, such as reading regularly and often to them, helping them learn language symbols and modelling reading and writing to them. Moreover, teachers can help children to comprehend meaning in their reading encounters, to learn the signs and symbols in their environment, and to link their reading to their writing (Neuman & Roskos, 2005:25; Foote et al., 2004:140).

By providing children with opportunities to listen, view, speak, read, and write, so that they can apply these skills meaningfully to their lives as part of their literacy
development, teachers’ practices were consistent with those of other scholars of literacy development (Foote et al., 2004:143; Gordon & Browne, 2000:484; Neuman, in Seefeldt & Wasik, 2006:216; Neuman & Roskos, 2005:25). Hence, the teachers’ beliefs about the use of choral reading and chanting portray a developmentally appropriate template for language development, in which children ought to interact with a print-rich environment (Kostelnik, 2004:331; Foote et al., 2004:139; Neuman & Roskos, 2005:25; Saracho & Spodek, 2003:180; Stipek, 2004:55). However, although children’s literacy experiences in the current study involved emphasis on the literacy acquisition limited to reading, listening, speaking and written activities copying (Gordon & Browne, 2000:484), these tasks were structured for whole group rather than individual activity. Children had less freedom to talk among themselves, except during free play in Belinda’s class (see addendum 15).

Consequently, despite a seemingly DAP approach to literacy, the children had limited opportunities to comprehend meaning from their limited chanting sessions (Foote et al., 2004:144). Therefore, although the children referred to the charts extensively, they had no opportunities to manipulate literacy-related material. This restricted their experiences to the visual only. Overall, choral reading in all the classes focused on a teacher-initiated, skills-based approach to children’s educational experiences, an observation consistent with those of other researchers, such as Jingbo and Elicker (2006:140) and Foote et al., (2004:145).

Consequently, the exclusive use of the choral approach to literacy, which did not embrace other senses, contrast with the DAP recommendation that children are active learners who must interact with their activities in a multiple number of ways “as they use their bodies as instruments for learning” (Kostelnik et al., 2004:46). Neuman and Roskos (2005:25) warn that children’s language literacy is more than letters and sounds, and that mimicking, reciting and repeating as strategies to teach language to children is like “going to the dentist - something they have to do, but not much fun”, and largely void of meaningful experiences. Foote et al. (2004:144) conclude that simple literacy events that require children to recall, name and identify objects may provide knowledge of literacy, but lack meaningfulness and authenticity. Enid’s comments echo the warning that simple chants are not effective literacy opportunities for some children:
In addition, the rotational approach that required every child to participate disregards sensitivity to children’s temperament. For example, during the lesson on the provinces of Kenya, Stella required a child to volunteer to locate selected ones. However, one child cried when Stella insisted that he should participate (see clip 19 on CD). This intimidated the child, even if the teacher’s intentions were positive. Therefore, despite the advantage of rotational participation, in which each child had opportunities to engage with their environment, choral reading is contextually inappropriate, depending on the level of sensitivity to children’s individual differences.

Regardless, choral reading encouraged all children to participate, including the shy and reserved, albeit reluctantly. As a literacy opportunity, most of the children benefited from choral reading since most had a chance to do it (Kostelnik et al., 2004:333). Children scrambled for choral leadership, which illustrates their enthusiasm. In most instances, the children organized themselves for choral activities, without the teacher’s instigation. Often, the leading child got the concepts correct, but even when they were uncertain in identifying a concept, another child quickly chipped in to identify the word, colour or letter.

More so, choral reading presented opportunities for peer affirmation (Kostelnik et al., 2004:48; LeBlanc & Bearison, 2004:501-2), through positive feedback about their abilities and success in activities (MacNaughton & Williams, 2004:99). For example, in most instances, when a child successfully completed a task, there was the ‘congratulatory chant’ as children sung and clapped ‘well done, well done, keep it up – a very good girl’. The girl took the complement as she put her hands akimbo, swinging her waist sideways. His is the way they are used to receiving the compliment (See MONMID clip 10 on CD). Apart from peer affirmation, choral reading maximizes children’s idle time. For example, in both Montessori preschool classes, children with a fast tempo waited a short while for a few more children to complete, before embarking on self-chosen choral activities. Children took turns among themselves to lead this activity, demonstrating co-operation among themselves (especially by chanting the responses after the lead-child) and strong
disposition to become literate (Foote et al., 2004:143). Moreover, it may have been an indication of compliance and self-regulation. As observed, any child who did not get support through peer chanting while reading reported the same to the teacher: For example:

In my view, children in this study displayed social and emotional maturity, since there were few incidences of anti-social behaviour. My observation appears to reflect the findings by Massetti and Bracken (2008:11), who demonstrated from their study that children attending literacy-focused classrooms showed lower rates of problem behaviour, as they also outperformed their counterparts attending socio-emotionally focused classrooms. Jingbo and Elicker (2006:140) also report high levels on obedience in Chinese kindergarteners, and they posit some benefits for children attending skills-focused, teacher-directed preschools; punctuality in attending to and completion of school tasks; efficient implementation of educational objectives; and the transmission of knowledge and skills repetitively. However, they also caution that such preschools hinder creative development due to high authority, and development of a callous attitude among children who model highly authoritative non-sympathetic teachers. All these observations equally apply to the current study.

5.3.3 COPYING AND WRITTEN TASK COMPLETION

“Children who have been made to write without anxiety over correct form or spelling often become immensely talented authors in the primary years” (Clay, in Trawick-Smith, 2003:399).

The second sub-theme that emerged as a teaching strategy was copying and task written completion. Both were written activities that included, but were not limited to, copying letters A-Z in small and capital letters, simply copying numbers, copying and naming picture-words, circling the correct word, copying and drawing of both Kiswahili and English items or completing sums31 (for an elaboration see footnote five). In most instances, the children copied exactly what the teacher had written, while in other tasks,

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31 The children in both Baby classes (average three- to four-year-olds) copied and completed tasks (such as copying a series of letters of the alphabet, matching different shapes, simple maths etc) with examples copied for them in their exercise books by their teachers. The children attending both Top classes (average five-year-olds) independently copied work from the chalkboard to their exercise books before completing the tasks.
they completed an English, Maths or Kiswahili task in their exercise books. In some instances, the children were required to fill a whole page of a certain letter, in a repetitive process (see addendum 13 for an illustration of copying activities). Closely related to copying is task completion, which is similar to copying, but in task completion children wrote an assignment with a right or wrong answer (see addendum 14 for an illustration of task-completion activities). Figure 25 and 26 below illustrate some of the practical experiences in the second column in the DICECE and Montessori preschools respectively.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>(Practical experiences on copying &amp; task-completion)</th>
<th>Illustrations</th>
<th>Illustration of emerging belief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belinda</td>
<td>Teacher has drawn similar pictures of ball, tree, and banana in each child’s books; children to draw alongside each picture and colour it; also copying. [e.g.DICMID CLIP 2 &amp; CLIP 4 on CD]</td>
<td>[BE…you just make them know that they came to school to know how to read and write [BE01:590;594;596;598;600]</td>
<td>Preschool as an academic environment Writing as a developmental process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[“The muscles… he develops the hands in writing; is when he can memorize the letter very well] [BE01:172; 176]</td>
<td></td>
</tr>
<tr>
<td>Lenora’s class</td>
<td>Children draw shapes and complete the names; children change words from capital letters to small letters [see images 16-21]</td>
<td>[It will make them to develop their finger muscles, through painting and colouring [LE01B:897]</td>
<td>Writing as a developmental process</td>
</tr>
</tbody>
</table>

**Figure 25:** An illustration of some beliefs: Copying and written task-completion in DICECE
Voyage 5: Children’s educational experiences and emerging teachers’ beliefs

<table>
<thead>
<tr>
<th>Teacher</th>
<th>(Practical experiences on copying &amp; task-completion)</th>
<th>Illustrations</th>
<th>Illustration of emerging belief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stella’s class</td>
<td>Teacher writes a letter or several letters or numbers in the children’s books and gives the child to copy these repetitively.</td>
<td>[ST: No. if I am doing math, I would like all my children to be doing math, [ST01:361].]</td>
<td>Subject-based approach to writing</td>
</tr>
<tr>
<td></td>
<td>[I wanted to write some work on their books; …later … they will write by themselves…there are some who are ahead, some who are behind so I have to go into their books individually and write the work [ST01:33; 35; 37; 39; 299; 301].]</td>
<td></td>
<td>Copying work into the children’s book because they are not ready to write and to attend to individual needs</td>
</tr>
<tr>
<td>Enid’s class</td>
<td><strong>Soma na uchore</strong> (read and copy) Kiswahili picture words Copying letters A-Z &amp; copying numbers 1-50 in a grid</td>
<td>Read the picture with word and then they copy...afterwards, I introduce filling in, as in pictures and then afterwards, that is when introduce drawing pictures and then they name, to join the syllabi] [EN01:86-88; 108; 110]</td>
<td>Progressive development of writing</td>
</tr>
</tbody>
</table>

**FIGURE 26:** An illustration of some beliefs: Copying and written task-completion in Montessori school

While vignette 3 above illustrates a typical copying and task-completion session in Enid’s class, Images 7 to 12 below show some examples of the copying and task-completion of children’s educational experiences in all the classes.

| Image 7: Add and subtract these sums | Image 8: Copy letters d, e, f, h and h |
FIGURE 27: Images 7-12 of sample of copying and task-completion activities
VIGNETTE 3: Typical rhythm of observed activities in Enid's class

Today my participating teacher has a white dotted top, and a matching black trouser on. She has a scarf to ward off the morning cold. The class I am observing has 26 children today. They were thirty yesterday. The children sound dull today, displaying little of the enthusiasm observed the previous day. Could it be perhaps because of the cold morning? Maybe... I can also sense a level of boredom today. I did not feel yesterday. In fact, one girl and one boy have their heads drooped over the table.

The teacher moves from her desk, located further back at the classroom, to the front to write some work on the blackboard. The first activity involves reading words, such as: aunt, box, once, what, they, you, have, tough, fruits, there, etc. Another activity involves reading sentences. ‘I have a pen’; ‘what is your name?’ ‘They can sing’; etc. The teacher covers the rest of the lesson by giving the children a written task. One session of the DVD ends. I decide to wait for another different activity to capture, because the children are still doing the same activity... In total, for this session alone, I count 40 items for the children to complete in the next 30 to 40 minutes before tea break.

I also notice that some children consistently complete their work fast, spending less than fifteen minutes to complete the task, while others, about four of them, take more time. They are clearly struggling. Those children, who finished their work and submitted it for marking, got back to their tables to sit, and relax. Other children seem to be struggling to complete the work. The teacher moves round the whole class supervising the children’s work, but she is particular with the latter group, whom she has assembled at one row, perhaps for close supervision. At times, she even rubs their work for them.

The sense of order in this class is palpable. As the children queue to present their work for marking, they do so in much silence, uncharacteristic of a preschool! Their discipline is unrivalled, as they line up to present work. None of them cuts the queue or makes undue noise. Neither is there any shoving, only inaudible whispers of ‘move back’ (to ease the space on the queue), as they advance towards the teacher’s table in turn.

As the tea-girl brings in the tea, already in mugs and the slices of bread on separate trays, the teacher asks the children to suspend their work so that they can take their tea. They say a short prayer before their snack of tea and two slices of bread. Again, I observe the same high sense of order as the children each pick one mug of tea and two slices of bread. As the children finish their tea, each one of them drops off their mugs, at a pail placed near the exit passage of the classroom, and quickly rush back to complete their work. Their tea break lasts about twenty minutes. Meanwhile, teacher Enid copies seventeen simple sums on the chalkboard, eight sums to add up and nine sums to subtract.

Three beliefs appeared to reinforce the copying and written task-based activities: writing as a developmental process, the need to provide parents with feedback, and the preparation for school transition. Although these processes link, I discuss each of them separately to capture teacher nuances as they relates to each. These are the belief themes considered in this section.

5.3.3.1 Copying and written task-based completion as a developmental process

Lenora, Belinda and Enid relate copying and task-completion as a developmentally appropriate educational strategy for children to develop their writing skill through repetitive writing. Repetitive writing seems to reinforce the teachers’ beliefs about writing as a developmental process. For example, Belinda’s comment illustrates the...
belief in the principle of proximal-distal motor development, in which development of writing control, proceeds from the shoulder-arm-wrist and finger muscle sequence, as children gain progressive control of the tripod-positioning of the fingers, necessary for developed writing (Kostelnik et al., 204:352). Lenora added:

![quotations](https://example.com/quotations.png)

All children wrote in their books, except those in Belinda’s class, who used additional slates and chalk to scribble (refer to addendum 15). Belinda’s comments, based on children’s slate writing activity, reinforces her belief in writing as a developmental process that enhances children’s physical dexterity as well as the memorization of learning tasks.

Writing as a developmental process in children proceeds through three stages; beginning at the prephonemic stage, children use random letters, through the phonemic stage, as they use consonants to stand for complete words, and the final conventional writing stage during the transitional stage (Trawick-Smith, 2003:398). Lamme (in Charlesworth, 2008:354-355) adds six requisite skills to writing: small muscle development, eye-hand coordination, ability to hold a writing tool, ability to make basic strokes, letter perception and orientation to printed language.

However, in what appeared to pre-empt the full cycle development of the stages outlined, children copied work already written by their teachers. Although the teachers believed that children developed their writing skill through stages, their approach that restricted children to copying compromises full development of the writing cycle. Copying ‘ready letters’ tends to reinforce the conventional stage at the expense of the pre-phonemic and phonemic stages, because the children in both baby classes copied work already written by the teacher (Trawick-Smith, 2003:398). Charlesworth (2008:354) warns children are learning writing at earlier before they can comprehend written work.
The practice of copying and written task completion expresses a belief that children’s work needs to reflect the primary school transition, a belief theme that I turn to next and to which Enid’s comment reinforces:

5.3.3.2 Copying and task-completion for successful school transition

All the teachers perceived the role of the preschool as an academic environment and therefore saw a need to use a subject-based approach to prepare children for primary school transition. In addition, both Lenora’s and Enid’s comment suggests a belief in repetitive writing as a memory strategy. Their comments illustrate their beliefs:

In addition, Enid’s comment illustrates the belief that children’s educational experiences should reflect readiness to transition to the primary school:

Children use their writing and reading abilities to communicate (Trawick-Smith, 2003:397). As an important literacy step, it can provide a record to assess children’s progress in learning (Crowther & Welhousen, 2004:132; MacNaughton & Williams, 2004:256). In addition, children link their learning to meaningful writing experiences (Neuman & Roskos, 2005:25). According to Kostelnik et al. (2004:333), children should
enjoy their writing experiences in a DAP writing framework which reflects voluntary urge to write, but in a quiet environment as suggested by Crowther and Wellhousen (2004:132). In addition to this, Smidt (2007:93) reminds that writing is a complex process that requires understanding of composition (what to write) and making the relevant marks (transcription).

However, the compulsory copying and completion of tasks, which the teacher marked, does not reflect a DAP framework. Consequently, this assessment-based writing undermines children’s security, sense of self-worth and belonging, depending on how successful they are as they complete the tasks (Kostelnik et al. 2004:48). Besides, the already written work for copying denies the children an opportunity to compose and transcribe (Smidt, 2007:93).

Scholars such as Crowther and Wellhousen (2004:136) have argued that some teachers could use writing for class control, especially when they have up to 30 children in their classes. Wang et al. (2008:243) concluded from their Chinese sample that class size could also influence preschool teachers’ beliefs about early childhood curriculum. However, in the current study, since all classes had between 15 and 30 children, the motive for using writing as a control measure does not apply to the current context. Instead, feedback to parents appeared to motivate copying and written-task activities, as the following discussion illustrates.

5.3.3.3 Copying and written activities act as feedback to parents

The need to provide parents with feedback about their children’s schoolwork seemed to motivate copying and written task completion. This belief seemed to reinforce an implicit belief that they operate in a competitive school environment in which parents compare schools to gauge the quality of learning, as illustrated by Belinda’s and Lenora’s comments.

[BE: They also have to know how to write, because parents expect that when their children come to school… they expect them to know how to write; and to read (silence)...so they are practicing] [In some schools they introduce some things; When a parent comes and see a child from another school can write, the child from another school cannot write so they say in that school they don’t teach] [BE01:131-134; 212; 214].

Voyage 5: Children’s educational experiences and emerging teachers’ beliefs
Belinda, Lenora’s and Enid’s comments highlight issues of accountability, focusing on written tasks and preparation for assessment (Foote et al., 2004:144; Katz, 2003; 1995:130; 1993; Kostelnik et al., 2006:186; Seefeldt & Wasik, 2006:148). Moreover, these teachers *equated learning* to formal tasks that involve written tasks, as Lenora’s remarks illustrate how she avoids [*‘too much learning’*- LE01B:384] [in baby and middle class], with less written tasks. Lenora’s comment, which is representative of the observed children’s educational experiences, expresses a belief that formal learning tasks that include knowledge of numbers and their values, and letters and their sounds, should be part of ‘*real learning*’ at the Top class (see LE01B:784, 794, 800). Furthermore, her belief that *learning* begins in Top class where children get to learn formal academic tasks suggests a belief in the formal approach to their written tasks observed in the study:

*LE: In middle class they continue until they know how to write letters A up to Z...known numbers very well letters with their sounds... be able to (pause) join the letters now, the letter sound... senior class now...that is now the year that we call the year of learning now. Because that is the final year of the child [at preschool] [LE01B: 386-392; 752; 690-774]*

Apart from beliefs related to school transition to the primary school, the teachers also believe that parents require children to write as part of their preschool educational experiences. They articulated this belief in the following comments:

*LE: we give writing material... for the children to do their work so that they will be taking them home, or we put in their files; if the parent comes to see the child’s progress, we give them to see] [LE01B: 670-674;680; & LE02:623]*

*BE: Children they go to [to school] read and write] [BE01:131-134]*

Belinda believes that *parents expect* that when children go to school they should engage in written tasks, as Stella concludes that when parents visit the school, the teacher should have feedback on children’s written work. Therefore, teachers believe that a preschool developmentally appropriate teaching strategy ought to include written tasks that parents can access. Consequently, this concern to provide feedback to parents reinforced copying and task-completion.
Although one of the DAP principles emphasizes the need to involve parents in their children’s learning (Kostelnik et al., 2005:18; Gordon & Browne, 2000:43-44; Seefeldt & Wasik, 2006:17), the children’s educational experiences should still embrace DAP principles rooted in neurological research (Gallagher, 2005:14). Goldstein (2007b:380) warns that the increasing demand for accountability and mastery of academic skills has made kindergarten teaching more complex. Robinson and Díaz (2006:59) agree that several global changes, such as privatization of preschools, and downgrading of the public school system in many parts of the world, impacts negatively on the practice of early childhood education.

Repetitive copying and task-completion embraced a highly structured, teacher-directed approach to children’s educational experiences. Regardless, most children were effective in completing their written tasks, albeit with a little pushing. However since these tasks took much of the children’s time, their motivation to learn was reduced because of the highly structured environment in which these tasks took place (Elkind in Zeng & Zeng, 2005:708; Goldstein, 2007b:390; Neuman & Roskos, 2005:23). Moreover, formal instruction violates the natural tendency through which children learn during play (Smidt, 2007:64; Sroufe et al., 1996:387-9; Zeng & Zeng, 2005:707). Children sitting “station style, learning to follow, comply and obey hours on end” subjects them to an early disinterest to learning (Neuman & Roskos, 2005:26).

Literature notwithstanding, there is need to be cautious when interpreting the observed copying and task-completion activities, and the emerging beliefs in the study context. Trawick-Smith (2003:280) warns that reading and writing mean different things in different cultures and that the DAP interpretation varies with the context (Jambunathan & Caulfield, 2006:255). Therefore, copying and task-completion as educational experiences have two implications for my research context. First, the open-design of most Kenyan traditional classrooms, including preschools (such as in the study context), does not support the quiet environment for writing. Secondly, the ‘social’, rather than the ‘privacy’ psyche among community members does not favour such ‘quiet’ environments. After all, the famous ‘social psyche’ quote by Philip Mbiti, a renowned African religion scholar, and a Kenyan himself, reiterated the social position of man in the African society, that “I am because we are, and since we are, therefore, I am” (Mbiti, 1969:108-9). The collectivist ‘social’ view of children in the study context contrasts with the
Westernised view that emphasize individualism and self-hood (Klein & Chen, 2001:12; Penn in Robinson & Díaz, 2006:56). Apart from the ‘social’ nature of the classrooms, the teachers’ beliefs about transition to primary school reinforced their approach to structured writing.

As observed, school transition requirements influence teachers’ beliefs that children must learn to copy work from the blackboard, the primary school way, as part of a successful transition programme. Therefore, Enid and Lenora, as teachers at the Top classes provided children with opportunities to copy tasks from the chalkboard, using a subject-based approach such as English tasks, Maths tasks and Kiswahili tasks. This finding is consistent with other research that teachers use a skills-based approach to children’s learning (Jingbo & Elicker, 2005:140). More to this, Biersteker et al. (2008:228) write that in most parts of Africa, pre-primary programs use a primary school instructions approach favoured by parents as a pre-requisite to success in later schooling. Adding to this social expectation paradigm, Jingbo and Elicker (2005:140) observed that their study reflected the Chinese kindergarten as a system with an educational plan and goals that mainly focuses on transmitting knowledge and skills. Foote et al. (2004:144) note that government regulation in addition to demands from parents may be key factors that determine the nature of children’s literacy opportunities.

5.3.4 Teaching Strategy: A General Discussion

Despite various sources of pressure, Goldstein (2007b:388) notes that teachers can use one of three approaches to balance the demands for standards as they remain developmentally appropriate. First, integration (craft knowledge and skills into play-based activities), second, demarcation (allocate specific time of the daily schedule for plays and some for worksheets), and third, acquiescence involves giving in to parent’s demands to teach academic skills, but with specific limits to these demands. Other scholars agree that it is possible for teachers to focus on skills-based teaching, as they remain developmentally appropriate (Massetti & Bracken, 2008:11; Goldstein, 2007b:380; Helm & Katz in Geist & Baum, 2005:32; Stipek, 2007).

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32 These were the five-year-old children preparing to transition to the primary school. Therefore, since primary school learning involves structured writing, the preschool teachers’ use of these approaches might reflect a developmentally appropriate approach, if perceived in the context.
Goldstein (2007b) offers a typology of blending both skills and child-centred approaches; acquiescing and accommodating by setting limits as to how much academics to teach, while still remaining DAP in their approach. With the exception of Belinda, who engaged in *demarcation*, the other three teachers engaged in what is *complete acquiescence* as they engaged children in *academic skills only*. The variety of teaching approaches appropriate for preschool did not emerge.

From an holistic perspective, the teaching strategies used by Lenora, Enid, and Stella did not embrace any of the ‘*balancing strategies*’ advanced by Goldstein (2007b). These lacked the child-centred approach, which embraces first-hand experiences, recommended in the early childhood literature (Bredekamp & Copple, 1997; Katz, 1995:108-109; Kostelnik et al., 2004:18; Stipek, 2007:742). In many instances, these teachers embraced *complete* acquiescence by focusing on teacher-directed basal worksheets. Although skills teaching benefits children to acquire basic skills, it denies them the ability to direct their own learning, and to transfer knowledge to other situations (Stipek, 2004:563; Stipek, 1993:48; Zeng & Zeng, 2005:712).

A child-centred approach, or one of the ‘*balancing* strategies’ suggested by Goldstein (2007b), provides a middle ground. However, since the concept of child-centred has varied meanings (Chung & Walsh, 2000:229), there is a need to interpret these teachers’ beliefs about their strategies cautiously, within the immediate social context. Viewed from the cultural context of the study (Jambunathan & Caulfield, 2006:257), the teachers’ beliefs and approach to children’s educational experiences are appropriate, because they prepare children to fit to the primary school as well as creating positive relationships with parents (Goldstein, 2007b:396), and since preschools in Kenya are downward extensions of the primary school (Prochner & Kabiru, 2008:128). Moreover, since children got an opportunity to learn by doing, through limited choices of their reading activities, they might also qualify as a DAP to reading, as expressed in the teachers’ beliefs.

However, the fact that the teachers, except Belinda, did not vary the teaching strategy, mainly focusing on a subject-based approach, might suggest a developmentally inappropriate curriculum (Kostelnik, 2004:18; Neuman & Roskos, 2005:26). Therefore, the literacy content selection fits a DAP framework, especially on language (Kostelnik et al., 2004:333; Saracho & Spodek, 2003:180), but the teaching method which is highly
structured to focus on isolated subjects, devoid of manipulative materials, shifts it towards DIP (Jambunathan & Caulfield, 2006:256; Katz, 1995:108-9). Regardless, Goldstein (2007b:374) warns that acquiescence must be viewed in the context in which it occurs, and that if it fulfils the larger goal of maintaining partnerships with parents, it is ‘justifiable’ but must be interspersed with strategies that first meet the developmental needs of the children.

In the current context, the teachers were concerned to meet parents’ expectations for learning, but since they completely acquiesced, they might have ignored children’s other developmental needs. Unlike in previous studies, where teachers’ beliefs reflected an emphasis on social and emotional development (Cassidy & Lawrence, 2002:202; Cuskelley & Detering, 2003:41; Lin et al., 2003:233; Prett-Frontczak et al., 2001:10; Timperley, 2003:335), teachers’ beliefs in the current study revealed a focus on selected aspects of cognitive development. Li (2003) and Jambunathan and Caulfield (2006:256) report similar observations, in which teachers focused on cognitive, isolated content in children’s learning. Therefore, for children to learn isolated content on a subject-based approach, do not reflect the universal definitions of a DAP approach to their learning (Kostelnik et al., 2004:149; McMullen et al., 2006:87). Citing other authors, Charlesworth (2008:340) warn that children exposed to testing, whole group activities focusing on teaching academic skills out of context as they sit for long periods are likely to exhibit stress behaviours.

Stipek (2007) and Miles and Stipek (2006) warn that social skills are necessary for academic success and ignoring the former might be perilous to the child’s development. Bronfenbrenner (1972:671) warned that apart from emphasizing subject matter, character formation is equally important, as it develops “the child’s qualities as a person - his values, motives and patterns of social response”, and gives partial responsibility to the home and the school to develop. Miles and Stipek (2006) demonstrated that children’s positive social skills translate to positive academic achievement in kindergarteners and first graders. Rosenholtz and Simpson (in Katz, 1995:114) conclude, “A pedagogical approach is appropriate if it adopts a variety of methods to teaching that avails a wide variety and range of activities to children”. Stipek (2007) adds her voice to the need for teachers to embed academic skills in playful and meaningful experiences for preschoolers.
Apart from interpreting the practices and beliefs from the dominant Western view of the typical preschool, which do not support child-led activities and the society’s expectations of the preschool, the prevailing practices are developmentally appropriate in the study context. This is because “the meanings attached to preschool as a space between are sometimes contested and various discourses conflict” as Prochner et al. (2008:200) conclude. Therefore, the wider social expectations of the preschool have influenced teachers’ practices, as reflected in children’s educational experiences, which is appropriate when considered within the social expectations for preschool. Levy (in Prochner et al., 2008:199-200) observes that the “space between home and school discourses” reflects the dominant expectations of a society, which varies by context.

The predominant approach to children’s educational activities, such as choral reading, copying and written activities meant that teachers seldom used learning materials. In the next section, I address teachers’ beliefs about the use of materials at three levels; the conceptual view held by all the teachers, the silence of materials in three classes, and the exception observed in Belinda’s class.

5.4 THEME 2: THE ‘SILENCING’/ USE OF LEARNING MATERIALS

The advocacy of [a] play-oriented curriculum has become “politically correct”. Yet many teachers do not really understand or accept developmentally appropriate approach with its emphasis on play. ‘The problem …is that teachers often interpret the idea of play-oriented curriculum in different ways, and express these interpretations in a wide variety of often contradictory classroom practice.…resulting in agreement at the rhetoric, but disagreement at the practical level of children’s experiences in classrooms (DeVries, 2002:13).

This section discusses the teachers’ beliefs about the use of learning materials in their respective classrooms. I take three different approaches in this section; first, I examine the conceptual beliefs of all teachers about the general importance of the use of materials. Whereas the discussion provides practical experiences among all the teachers regarding their use/silencing of materials, the emerging beliefs do not reflect their practical experiences, except in Belinda’s class. Second, I scrutinize teachers’ practical

As footnoted earlier, the metaphor of the teachers ‘silencing’ materials derives from the active process where they might have deliberately chosen not to use the materials, even though these were available in their classes.
experiences about the *silence* of the learning materials, and the reasons for the prevalence of this practice in three of the four classes observed. Third, I explore how Belinda engaged children with free play. Figure 28 (below) summarizes the themes under discussion in this section. The figure illustrates the three levels of the discussion. Level A represents the conceptual view about materials (even if they did not use them). Level B represents the actual observation that Lenora, Stella and Enid did not use materials. Level C represents Belinda’s actual use of materials and her emerging beliefs. The arrow linking level A and C indicates that Belinda expressed both a conceptual view and a practical approach to use of the learning materials.

**FIGURE 28:** Levels of analysis and presentation of use of materials

### 5.4.1 USEFULNESS OF MATERIALS: A CONCEPTUAL VIEW

First, we as educators must recognize the unique ways in which children are children, not miniature adults (Kostelnik *et al.*, 2004:17).

This section presents a discussion on each teacher’s conceptual view of the use of learning materials, even though this was not evident in their observed practical experiences. There were some handmade wooden Montessori materials in both Montessori classes, including Belinda’s class, and locally available waste-tub materials,
including margarine, washing powder and spice tubs, and other empty packaging packs in both DICECE classes, as materials for potential engagement.

From their discussions, all the teachers endorsed the use of materials, although Lenora, Enid and Stella silenced these in *children’s educational experiences*. Belinda was the exception. Conceptually, the teachers’ beliefs linked the use of materials to children’s *creativity*, *physical development* and their *emotional* development. The teachers’ emerging beliefs reflected a DAP approach to the use of materials in children’s learning to enhance their holistic development and approach to learning (Crowther & Wellhousen, 2004:187; Gallagher, 2005:18; Kostelnik *et al.*, 2004:49; Seefeldt & Wasik, 2006:89; Smidt, 2006:54).

### 5.4.1.1 Learning materials bridge cognitive development

All teachers valued the use of learning materials to enhance children’s *cognitive* development as their comments underscore:

**BE:** So they have the chance to develop their talent

**ST:** whereby I find eeh using this material is quite, a good method because as a child sees, feels, and does whatever she/her is doing with the material. I should have those “ninis” sand paper, whereby the child will feel, if it was number one (1) the child will feel number one just that

**ST:** ...because all these materials are like a textbook

**BE:** So they have the chance to develop their talent

**ST:** whereby I find eeh using this material is quite, a good method because as a child sees, feels, and does whatever she/her is doing with the material. I should have those “ninis” sand paper, whereby the child will feel, if it was number one (1) the child will feel number one just that

For example, Stella linked the use of materials to children’s ‘muscular memory’ of numbers (Montessori, 1920:277), equating materials to a textbook. De Vries *et al.* (2002:41) note that as children engage with learning tasks, they get opportunities to reason as they do problem solving in tangible experiences that engage them in trial and error. These processes not only enhance personal effort in problem solving, but they also provide children with opportunities to develop confidence in their thinking skills.
5.4.1.2 Learning materials enhance physical development

Belinda and Enid articulated the benefits of using materials to enhance children’s *physical development*. Lenora linked children’s free-play to their *social and emotional development*, through shared experiences as they enjoyed their learning experiences through free interaction with each other and with materials. Their comments illustrate their belief:

In line with the holistic approach to child development, early childhood education ought to provide opportunities that integrate children’s cognitive, physical, social, and emotional development. Lenora’s comments corroborate the conclusion about the latter two aspects of development:

It has been suggested by Sutterby and Thornton (in Charlesworth, 2008:353) that large scale physical-motor movements such as hopping, jumping, running and climbing affect the growth of the sensorimotor cortex in the brain. Therefore activities that require children to move their whole bodies (development of gross-motor skill) and those that require them to move smaller muscles (development of fine-motor skill) are valuable for children’s physical development. Apart from gaining control over their body movements, as children develop physically, they can also control their ability to play effectively through throwing, jumping, hoping and skipping. These various levels of body
control become requisite to children’s development fine-motor muscles for writing (Charlesworth, 2008:353, 355).

It appears from their comments that all the teachers in this study believed that the use of learning materials was important for different dimensions of children’s development; physical, social, emotional and cognitive domains. However, each teacher linked it to the children’s readiness to engage in educational tasks. Therefore, these teachers also linked children’s physical dexterity to the development of their writing skill that they emphasized through copying tasks rather than engaging children with materials. From Stella’s, Lenora’s and Enid’s comments, it is evident they use materials only for introductory purposes at the beginning of the preschool year, until children are able to write, despite displaying a variety of such learning materials in their classes, and demonstrating their knowledge about their uses.

Young children require sensorial stimulation for their overall development (Blakemore & Frith, 2005:461; Bredekamp & Copple, 1997:125; Broadhead, 2001:34; Crowther & Wellhousen, 2004:185; Montessori, 1820:23; Wasik & Seefeldt, 2006:16-7). Since children learn by connecting their concrete experiences to their thinking to test out theories (Foot, Smith & Ellis, 2004:144), as they “take in data through all their senses” (Kostelnik et al., 2004:46), the use of learning materials in the early childhood environment is critical to their learning (Beaty, 1996:5).

Although all the teachers in the study valued materials, they did not engage children with them. Hyson (in McMullen et al., 2006:82) suggests that colleagues and administrators might influence teachers to endorse methods that they do not believe in. The fact that teachers in this study endorsed the use of materials despite ‘silencing’ them is consistent with a conclusion by Cassidy and Lawrence (2000:202) and Miller and Smith (2004:128), that teachers’ endorsement of materials does not always translate to its use. Prochner, Cleghorn and Green (2008:190) link the purposes that materials serve to the social, cultural, historical and the policy framework of the preschool. The teachers’ ‘silencing’ of materials arose from their concern to prepare children for academic tasks, which they perceived to be in conflict with the use of materials. In the next section, I explore some of the emerging beliefs related to the ‘silencing of materials’.
5.4.2 THE ‘SILENCING’ OF LEARNING MATERIALS: A PRACTICAL OBSERVATION

It is imperative that the learning experiences offered to the very young, respect their natural, playful style of learning, rather than impose a rigid and tedious approaches to mastering academic skills (Jalongo et al., 2004:145).

The section juxtaposes the availability of materials with their use in the classes of Lenora, Stella and Enid. All the observed classes had a varying degree and availability of teaching materials. The Montessori preschool classes had most of the recommended Montessori materials which included geometric insets of woods, wooden tablets, solid wood insets, sand paper letters, number rods and colour tablets (Montessori, 1920), all displayed in open-shelves within the children’s reach (Prochner et al., 2008:196). The DICECE classrooms had locally available empty tubs materials, such as those of detergent, margarine and fresh produce packages (strawberry tubs, spice tins and others), that were stored in a lockable cupboard. This range of local materials reflects the conclusion by Prochner et al. (2008:199) that some materials at the preschool have meaning within the local culture. Although the empty tubs may not be typically ‘indigenous’, they nevertheless form part of the social life of the children who interact with the commercial empty tubs in their social and cultural experiences.

As already footnoted, the metaphorical term ‘silencing of materials’ emphasizes the availability of the learning materials and opportunities to use them, but it did not translate into observed children’s interaction with them. Addendum 14 is a summary of the lessons observed and a general content of these lessons. As the teachers ‘silenced’ materials, it emerged that they perceived various sources of pressure to be in conflict with their use of materials. This appears to resonate with the conclusion by Devault in Goldstein (2008:253) and that of Geist and Baum (2005), that kindergarten teachers are increasingly under pressure to remain DAP, one of whose principles is to engage children with learning materials.

These concerns included pressure from parents for written tasks, different transition primary school curriculum and other external sources of pressure that include a competitive school environment and peer influence (to be discussed in the next voyage). Figure 29 and 30 (below) summarize the sub-themes related to silencing of materials as a response to the different perceived sources of pressure. Specifically, figure 28
summarizes the nuances from the interviews with the teachers as to why they did not engage children with materials. The following section elaborates on each of these concerns as illustrated in figure 29 below.

**Figure 29: A summary of beliefs related to the ‘silence of materials’**

### 5.4.2.1 Silencing of materials: Responding to pressure from parents

Parents are increasingly under pressure to ensure that their children succeed and survive the education system… parental anxiety about their children’s academic success begins in the preschool years… (Robinson & Diaz, 2006:51).

Although this study does not address the issue of quality perspectives in early childhood education (Katz, 1995), the conflict between what parents and other stakeholders expect, and the ideals of a DAP approach to children’s manipulation of materials is apparent from the current study. From the teachers’ comments summarized in figure 30 (below), it might appear that the teachers believe there exists a conflict between the focus on academics, which requires children to engage in elaborate writing, and the use of materials, requiring playful learning. The following sentiments summarize their beliefs about pressure from parents:

- **BE: They also have to know how to write, because parents expect that when their children come to school…**[BE01:131; 133; 134]

- **LE: So, sometimes we have challenges, sometimes the parent does not understand…**[when a child fails the interview][LE01:134-02]
The concern that parents expect their children to write at preschool limits teachers from exposing children to manipulative materials. This reflects an observation by McMullen et al. (2005:454), citing a similar experience in Korea as an example. Jambunathan and Caulfield (2006:256), citing a case from India, and Zeng and Zeng (2005:716) in a US example, illustrate similar experiences of how pressure from parents restricts teachers from using play, thereby reflecting similar experiences and beliefs of the teachers in the study context. In contrast, Lee and Ginsberg (2007:19) note that the hot–housing phenomenon, where parents put too much academic pressure on their children at home, elicited sympathy among the teachers in their study who did not see it necessary to reinforce what parents do at home. Instead, they felt that children needed to use opportunities for social enrichment, rather than spend time in academic skills acquisition.

The beliefs expressed by these teachers seem to indicate a conflict between their own expectations and that of parents and other stakeholders. This is consistent with conclusions that a difference in expectations for Kindergarten teachers from various stakeholders create tension and conflict on what dimensions of learning they need to

In addition to responding to pressure from the parents, teachers linked the silence of materials to a perceived discontinuity between the preschool curriculum and the transition requirements. In the next section, I discuss how teachers’ beliefs about these differences have silenced their use of materials.

5.4.2.2 The silencing of materials: Different transition requirements

It is imperative that the transition from home to school should not be so drastic as to cause psychological or emotional stress by imposing rigid schedules, long periods of sedentary activity, confined spaces, unsafe equipment, or intense academic pressures on young children (Jalongo et al., 2004:144).

The teachers’ concerns about primary school transition requirements underscored the silence of materials, particularly among the Montessori teachers. Three sub-themes emerged from the teachers’ beliefs that reinforce the silencing of the materials, namely lack of continuity between preschool and primary school curriculum; lack of time to blend materials and academic tasks; and a perceived inadequate preschool curriculum. Figure 31 (below) illustrates some nuances related to school transition.
Enid and Stella, who are the Montessori teachers, believe that there was a lack of continuity between the Montessori curriculum and mainstream primary schools. They emphasized that children who attend Montessori preschools would be disadvantaged if they engaged with the elaborate materials recommended for the Montessori system, without much task-based written activities. Stella’s comments stress this view:

> From Stella’s comments, it is evident that the teachers believe a DAP approach to the use of materials should incorporate academic skills in the preschool curriculum, so that children who attend Montessori preschools successfully make a transition to the primary school. From observations, it seems that emphasis on psycho-fine-motor development through copying, colouring, and differentiated task completion, which replaced children’s use of manipulatives, results from pressure to prepare them early for transition to primary school. The compromise on the use of materials resulted from perceived time constraints, as Stella’s, Enid’s and Lenora’s sentiments express:

> [ST: Whereby here, we just introduce the sounds, quickly into two letters double sounds quickly to three letter words, quickly to sentences, without a lot of practice…we have been doing that rushing but they have been coping][ST03:405-411]
> [LE: Standard one is not far, don’t play…Yah so the teachers we yaani (that is) we take it more seriously in senior class, Yah we do not give them time to play a lot][LE01B:214-218]
> [EN...so you discover that most of the materials we use in Montessori because they are slow you go on a slow pace you can just go that fast we have to put them aside.][EN02:424; 456; 458; EN04:225]

From the teachers’ comments, materials do not co-exist with academic work due to time constraints. Therefore, a DAP approach to the use of materials requires more time than they currently have, and they have forgone the use of materials to focus on developing academic skills as was observed in their classes. Stella and Enid comment on this compromise:
Although the DICECE teachers did not emphasize lack of time as a constraint to their use of materials, or difference in transition curriculum, Lenora, who is a DICECE teacher, believes that the recommended preschool content is too elementary for the current demand to prepare children for primary school transition. Besides, she notes that they have so much to cover before the standard one interview. In her view:

> Therefore, due to perceived differences between preschool curriculum content, transition requirements, and time constraints, teachers believe that it is sufficient for the children to manipulate learning materials only in their first and second years of preschool. In the third year, the teachers believe that they should focus on academic tasks. Enid and Lenora elaborate on their beliefs:

> Because teachers might only use materials to introduce concepts, such as letters, numbers, colours and words, they believed that materials are only necessary to expose children to basic literacy concepts. Their comments corroborate this interpretation:
Enid and Lenora both taught in the last year of preschool\(^{34}\), hence justifying their focus on preparing children for primary school transition. However, although Stella and Belinda taught four-year-olds, hence still in their perceived materials use phase, only Belinda engaged children with manipulatives. This suggests that the teachers still focus on the demands for the perceived transition requirements, even before the last year of preschool. Consequently, the motive to compromise on the use of materials during the first and second year of preschool, particularly in Stella’s class, resides elsewhere than primary school transition requirements.

Generally, from the comments from Stella, Enid and Lenora it is evident that the need for children to be ready academically might have silenced their use of materials. Although the use of materials develops children’s fine motor skills, the teachers’ preponderance to structured written tasks arises from the social value attached to children’s worksheets (McMullen et al., 2005:454; Miller & Smith, 2004:131). Low adult child ratio (Foote et al., 2005:142; McMullen et al., 2005:454) and parental pressure (Jambunathan & Caulfield, 2006:256; McMullen et al., 2005:454; Zeng & Zeng, 2005:716) also affect use of worksheets. By using copying, task-completion and choral reading, the teachers might also focus on those skills that provide a record of the child’s progress for the parents to appraise their children’s learning apart from preparing them to ease into primary school.

Skills-based pressure appears to be a problematic transition concern (Timperley et al., 2003:32; Jalongo et al., 2004:145; Jambunathan & Caulfield, 2006:256), which emphasizes different values. Teachers’ concerns reflect variable perceptions about transition requirements (Timperley et al., 2003:32; Jalongo et al., 2004:145; Jambunathan & Caulfield, 2006:256) or the expectation to meet mandated standards (Goldstein, 2007b:378; Wang et al., 2008:244). This observation is consistent with the conclusion by Biersteker et al., (2008:243) that preschools in Kenya and South Africa face pressure for skills-based learning.

Lightfoot and Valsiner (in Cuskelly & Detering, 2003:45) found that teachers’ knowledge of transition originated from naïve theories located in their experiences rather than from professional knowledge based on teacher training. Therefore, teachers draw from their experiences about what Kenyan society values for her children. Prochnner and

\(^{34}\) At the end of the last year of preschool, children do an interview which focuses on academic content, which they must pass to be admitted to standard one.
Kabiru (2008:128) observe in preschool in Kenya that, “to satisfy parents, preschool teachers often put pressure on children to learn skills beyond their ability”. However, Goldstein (2007b:390) refers to this approach to focus on basal skills acquisition as “boring kindergarten seatwork”. Stipek (2007:741) warns that academic expectations for kindergarten might “come in the form of whole group instruction, rigid pacing, and repetitive, de-contextualized tasks - a kind of drill and kill”

The inconsistency between teachers’ beliefs and their actual use of DAP that incorporates materials in their teaching, reflects the conclusions by other scholars that teachers beliefs do not always reflect their practices (Cassidy & Lawrence, 2000:204; Foote et al., 2004:145; Wilcox-Herzog & Ward, 2002). In addition, teachers tend to focus on skills-based learning (Jambunathan & Caulfield, 2006:255-6). This contrasts with the observations by Goldstein (2007b:396) that teachers in her study blended both standards and child development needs through multiple approaches to teaching, suggesting that it is possible to blend both the standards or the socio-political demands with DAP as concluded by Goldstein (2007b:396; 2008:259).

5.4.2.3 Silencing of materials: A competitive school environment

The following section is a discussion of the teacher nuances that suggest that they did not use materials because of a competitive school environment. Figure 32(below) summarizes some of the nuances about a competitive school environment.

**Figure 32:** Beliefs related to the Silence of materials: - competitive school environment
Stella compares the demands of the current preschool to her previous preschool, while Enid was facing a conflict between theory and practice as teachers in her school were using methods that did not reflect the Montessori approach. Belinda and Lenora were concerned to equip their children with the primary school transition requirements, even as Lenora emphasized her concern to increase enrolment in her school by posting good transition interview results.

Stella, who had a long experience as a Montessori teacher both in her current school and elsewhere, believed that the current environment pressurized them to teach academic skills to children that focus on content beyond their scope. As Stella’s comments reflect, school and social forces influence teachers’ views of readiness (Graue, in Lin, Lawrence & Gorell, 2003:226; Schoonmaker & Ryan, in Lawrence & Cassidy, 2000:194).

Belinda said that her approach ought to reflect what was going on in their environment, and even when written tasks were too soon for children, she had to engage children in them to reflect on the practices prevailing in the social setting, as this “is the way in preschools”. In addition, Belinda expressed fear of children ‘not fitting’ in the current environment if she did not expose them to early writing. In her comments:

Belinda’s belief that schools compete introduces a competitive psyche in her approach to children’s learning tasks to prepare children early to excel in examinations. There is a growing concern that preschools in Kenya, especially those in urban centres, are increasingly focusing on an exclusively academic curriculum (Mbugua, 2004:196; Mwaura, 2008:238; Prochner & Kabiru, 2008:126). Hujala (2002:101) notes that programmes that use a subject-based approach at the preschool undermine spontaneity and exploration during learning, and yet teachers should embrace a context-based sensitivity to the way they organize children’s daily learning experiences.
Even as schools compete, the focus on cognitive development negates the holistic approach to children’s learning and teaching. Partnerships for preschool provision in Kenya (Adams & Swadener, 2000:388; Kenya & UNESCO, 2005:17; Prochner & Kabiru, 2008:127), have reinforced such a cognitive focus because preschools depend on the number of children enrolled for revenue to run the school. Lenora linked the academic focus on children’s educational experiences to the school’s enrolment:

> [LE: Eh the competition, you see if we don’t teach these children beyond (pause) what we are being taught in college...because we want more children to come to our school...because the parents see the school that does well or the school that takes more children to standard one. So we try all possible ways to see that the children are taken to standard one so that we get more children][LE01A: 697-709].

Lenora believed that parents enrol their children in preschools that perform well in their standard one interview, which in her view determines the school’s enrolment35, apart from absolving the teacher from any blame:

> [LE: these parents let us say if the child doesn’t make [pass interview], will lay the blame on the teacher, can even go to the extent of even...taking the children for transfer. If they have younger children, they might move the children to another school...just guessing that the teacher is the one with the weakness, because children, children, there are some children who have special needs [LE01:118-124-02]

Lenora linked the success of the children in the interview to teachers’ self-esteem, attributing such success to the teachers’ ability. In the following comment she summarised the need to retain her employment and peace-of-mind by preparing the children to pass the interview:

> [LE: Yah, because I will be harassed, and I will not have peace, I might even lose my job. Yah][LE02:679]

Although Enid did not refer to a competitive environment, it can be inferred from her comments that she was under pressure to keep pace with colleagues, even if it meant using an inappropriate approach, such as she mentioned using, ‘writing over’ to develop children’s writing skills. Enid felt she was under pressure to match her methods with those of other teachers in the same school, even if she might not agree with them:

35 In one of our informal conversations, Lenora expressed her concern that she might be targeted for retrenchment if the school’s enrolment did not increase. Her nuances about perceived pressure might reflect her state of mind.
‘Writing over’, to which Enid referred, is a faster approach to children’s writing, if
varying the teaching approach relates to teachers’ felt time constraints and to the urgency
to ‘catch up’ with colleagues. Kostelnik et al. (2004:325) underline this divergent and
confusing approach to teaching within the same school as an issue, which requires
redressing. In their view, teachers who are new in the profession face conflict when there
is a disparity between their professional knowledge and their practices on how to teach
emerging literacy. Although Enid was not new to the profession (with nine years
teaching experience), she was facing a conflict between practice and theory not limited to
new teachers only, but also including teachers who have experience and so might face
pedagogic conflict.

Preschool pedagogies ought to reflect children’s age (Jalongo et al., 2004:145) because
their information processing is different from that of adults (Piaget, in Charlesworth et
al., 1993:15). Although the practical dynamics vary by context, Goldstein (2008:254)
cautions that teachers in the USA find it difficult to incorporate set-standards to a DAP
framework. In another study among six primary one teachers in Scotland, Cassidy
(2005:151) reports that teachers felt the pressure to use teacher-directed approaches in ‘a
pre-set curriculum’.

5.4.2.4 A general discussion about silence of materials

In summary, as discussed, the children’s educational experiences in all classes except
Belinda’s were predominantly subject-based, structured workbook tasks. Apart from
engaging with other academic skills-based content, children in Belinda’s class also
engaged with materials. In summary, figure 33 (below) illustrates a glimpse of children’s
educational experiences (also see addendum 11 for details).
The teachers’ approach to teaching, even in the Montessori preschool with scripted materials, reflected a predominantly teacher-directed class. Teachers used a variety of teacher-directed approaches, such as choral reading, through modelling, copying, and task completion. All these approaches focus on children’s academic learning, a finding which reflects previous observations related to the emphasis on primary (elementary) school transition (Timperley et al., 2003:32; Jalongo et al., 2004:145; Jambunathan & Caulfield, 2006:256), which emphasizes different content for learning.

The beliefs emerging as regards the silence of materials reflect a response to various sources of pressure, such as the need to prepare children to transition to the primary school, perceived pressure from parents for written tasks, and other sources of pressure, such as colleague influences, and a competitive school environment, among other factors. These factors shaped the emergent teaching strategy and silencing or use of materials in the study context.

Teachers’ beliefs about the requirements for school transition have influenced their beliefs about the appropriate practices (Lightfoot & Valsiner, in Cuskelly & Detering, 2003:45). As discussed above, children engaged with reading activities of the print-rich environment, completing tasks and copying letters of the alphabet, mostly as whole group activities, associated with higher grades than kindergarten (Vartuli, 1999:504). This approach demonstrates a high structure with an academic emphasis (Jambunathan & Caulfield, 2006:256; McMullen et al., 2006:87) or basal reading and writing emphasis (Neuman & Roskos, 2005:23;25) or ‘a standards-based accountability’ system (Goldstein, 2007b:379).
In some instances, such as in literacy experiences, the teachers’ beliefs reflect developmentally appropriate teaching practices, which included story-telling and choral reading (Foote et al., 2004:136; Miller & Smith, 2004:122; Stipek, 2004:551; Yoo, 2005:142). Teachers hold a divergent view towards children’s literacy, ranging from literacy as a skills-based knowledge of the letters of the alphabet to more integrated approaches (Foote et al., 2004:136). However, such a dichotomy rarely exists in reality. Rather, teachers blend skills-based and expository literacy learning during their teaching (Miller & Smith, 2005:128). The approach by teachers in the study reflects this continuum, but it relies more on a structured teacher-directed approach (Stipek, 2004:551) than on a child-centred approach.

On the other hand, Lee and Ginsberg (2008:20) report that pre-kindergarten teachers feel that changes in the early education field have influenced their beliefs that children should be exposed to early mathematics. The disquiet about school readiness concerns that has made it increasingly difficult for teachers to implement a developmentally appropriate curriculum is noted by several authors (Geist & Baum, 2005:28; Wien, in Goldstein, 2007b:380; 2008:254; Kostelnik et al., 2004:15; Neuman & Roskos, 2005:24; Seefeldt & Wasik, 2006:35).

In Goldstein’s (2007b) terminology, Enid, Stella and Lenora embrace complete acquiescence in their beliefs, giving in to parents’ demands rather than meeting children’s needs for learning. Jambunathan and Caulfield (2006:256) conclude that class size determines the approach used by the teacher to plan children’s learning, while Foote et al., (2004:142) observe that class size also affects the duration of interactions between children and their teachers. Teachers with few children tend to use child-centred approaches, while those with large classes prefer question-and-answer approaches. Massetti and Bracken (2008:10) conclude from their study that children engaged in skills-focused classrooms exhibited lower levels of behavioural and social problems than did their counterparts in social development-oriented classrooms.

Because not all teachers had teaching assistants, they tactfully used choral activities to fill up for their temporary withdrawals, as illustrated by vignette one. In my view, choral reading was one behaviour management strategy effectively used by all the teachers to occupy the children as the rest completed a workbook task, while they were off-task as
they marked, or while they prepared children’s subsequent tasks. In Stella’s case, she was in her office. Choral reading thus benefited both the teacher and children. Rarely did any child wonder aimlessly, nor display much negative behaviour, even when the teacher was off-task.

Prochner et al. (2008:190-191; 200) observe that the organisation of space presumes “an educational purpose” that the programme serves. However, in my study, the space for the silent materials, although available in the three classes, remained ambiguous for most of the time. In addition, they caution that the tendency to interpret the availability and use of materials from a Western-oriented view might not reflect cultural diversity or “conceptions of childhood and early childhood education” in cultures other than Western ones. Moreover, Prochner et al. (2008:200) observed from their study that the use of space and materials in the preschool reflects the meaning that a community attaches to the purpose of the preschool, albeit one often contested.

Although both Montessori preschools had materials organised according to ‘the Western view’, the children’s learning might not have been expressed in these materials, due to an emphasis on the academic role of the preschool to reflect the wider society’s “values and beliefs that support preparing children for formal schooling” (Prochner, et al., 2008:200). However, despite operating in a similar environment, it is difficult to explain Belinda’s approach that reflected developmentally appropriate practices and beliefs in the use of materials.

The beliefs expressed by the teachers about their non-use of learning materials support a teacher-directed strategy, where ‘skills and competence’ are being refined by neo-liberal agendas as acceptable norms of competence in standardized tests (Tierney, in Robinson & Díaz, 2006:51). Therefore, to develop such skills kindergarten teachers tend to use isolated subject-based approaches in their teaching (Jambunathan & Caulfield, 2006:256; McMullen et al., 2006:87).

The teacher-directed approaches used by the teachers contrast with those found by previous research into teachers embedded skills-based instruction within a DAP framework (Massetti & Bracken, 2008:11; Goldstein, 2007b:380; Wang et al.,

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36 Stella also doubled-up as a Head teacher, so occasionally, she withdrew to her office annexed to her class to attend to some parents visiting the school during learning time
Geist and Baum (2005:28) agree that teachers who are committed to a DAP principles approach can still implement them, regardless of the amount of external pressure. I will address some of the factors affecting the use of DAP in the next chapter.

Teachers in this study consolidate the conclusion by Biersteker et al. (2008:232) and Republic of Kenya-and UNESCO (2005:33) that one of the challenges facing ECD in Kenya is the overemphasis on formal learning tasks. Similar conclusions have been observed elsewhere (Goldstein, 2007b:2008; Cassidy, 2005). Therefore, I shall return to these issues in the subsequent chapters, as I consider the underlying factors influencing teachers’ beliefs and the way the wider social factors have had an impact on how teachers’ express children’s educational experiences. However, Goldstein (2007b; 2008) notes that it is still possible to blend standards into a DAP framework, the approach that Belinda embraced, as she was able to create time for children to engage in free play. In the following section, I discuss how materials were used to bring life to Belinda’s class.

5.4.3 THE EXCEPTION: CHILDREN ENGAGE IN FREE PLAY

5.4.3.1 Introduction

“Space and materials for preschoolers should enhance socialness, support a sense of emotional safety, and reflect respect for familial and cultural experiences of the child” (Jalongo et al., 2004:144).

Belinda engaged children in a variety of free choice activities, which included play with empty tubs, play dough, writing on slates, and an assortment of Montessori materials. Prochner et al. (2008:197) define free play as “an activity carried out over a protracted period of time in which children choose the activity and their playmate as a means to foster higher order thinking, foster social relationships, and aid emotional growth”. However, Stipek (2007) notes that play need not be aimless, but rather it should embed learning in children’s experiences. The Kenya Ministry of Education recommends a holistic approach to preschool learning through play-based learning (Republic of Kenya, 2006a:14-16). The standards document emphasizes that children should not learn through a subject-based approach, but instead they should engage in play-based activities. In relation to children’s developmental age and learning, Kostelnik et al. (2004:46), refer to children as ‘motoric beings’ that use all their senses to satisfy their

Note: Belinda is a Montessori trained teacher working in a DICECE preschool.
curiosity to learn. Smidt (2007:30) adds that all children learn all the time in the totality of their experiences.

Therefore, it is reasonable to facilitate this ‘multisensory curiosity’ as a learning avenue, by providing the relevant materials (Blakemore & Frith, 2005:461; Bredekamp & Copple, 1997:125; Broadhead, 2001:34; Crowther & Wellhousen, 2004:185; Montessori, 1820:23). Stimulating early learning environments enhances the brain’s neural connections (Blakemore & Frith, 2005; Gallagher, 2005:15), which develop according to each child’s access to multisensory experiences and their unique ways of repetitive interaction with such environments (Begley, in Kostelnik et al., 2004:290; Gallagher, 2005:15-6).

In Belinda’s class, the children had daily opportunities to manipulate these materials, limitations of free movement notwithstanding. However, like her counterparts, she had no specified learning centres for the children to engage with freely. Instead, the children played as they sat or crouched on their chairs (as illustrated in images 13-18, below). Dudek (in Prochner et al., 2008:197) observed that free play epitomizes the mature image of early childhood education, as opposed to direct teaching and school-like activities with little or no play. Framed from this view, Belinda’s preschool class portrayed a ‘mature system’. The following images in figure 34 (below) illustrate some of the free play activities with which children in Belinda’s class engaged as part of their free choice activities.

5.4.3.2 Use of materials: Develops children’s creativity

Our task regarding creativity is to help children climb their own mountains, as high as possible. No one can do more’ Loris Mallaguzi’s comment on the adult’s role in children’s emergence of creativity (Mallaguzi, in Edwards, 1998:77).

Belinda believes that children explore their creative potential, as they develop their physical dexterity during free playtime. In view of her comments, Belinda is likely to believe that children need to explore the learning materials freely, in order to apply their experiential knowledge, not only to develop their cognitive abilities but also their physical dexterity. Referring to a free choice activity, she said38:

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38 The comments are based on children’s manipulation of playdough.
Sandberg and Eriksson (2008:1) argue that the niche potential of an environment determines the level of children’s participation because “the more niches the individual has access to, the more opportunities for development they have”. Additionally, they write that individual children’s experience of the niche potential varies, depending on their differential perceptions and interpretations, and the availability of such niches. Harkness (cited by Prochner et al., 2008:190) defines a related concept ‘developmental niche’ as a theoretical framework for studying cultural regulation of the microenvironment of the child.

Belinda’s approach to enlarge the children’s learning portrayed a variety of ‘child-niche potential’ experiences related to materials. These included bottle tops, detergent tubs, and margarine tubs, with which children expressed their cognitive and social abilities as they reconstructed their experiences (Seefeldt & Wasik, 2006:89; Smidt, 2006:54), such as combine harvesters, drawing water from a well, making a play dough ‘cell phone’ (image 16 in figure 34 below), among other experience-related objects.
Therefore, as children had opportunities to interact with the open-ended materials, they engaged with symbolic play, and so explored their creative potential. Belinda’s approach to free play to tap into children’s creativity is consistent with observations by Mallaguzi, (1998:75), that creativity arises not out of extraordinary, but of daily experiences that children have to engage freely. Muscari (2006:128) notes that time, space, and freedom, yields a creative potential among children.

The freedom enjoyed by the children as illustrated by vignette 4 resulted in a diversity of responses to these open-ended materials. However, although Belinda moved among children during free play, she verbalised little during the children’s freeplay, consistent
with Liddell’s observation (in Prochner et al., 2008:196), that teachers in a South African research used less language with children during play. Walsh (in Kontos & Dunn, 1993:55) also noted that caregivers might be reluctant to interact with children in active way, especially if they subscribe to the maturational theory. The behaviourist might also think it is intrusive to get involved in children’s play (Farran et al., in Kontos & Dunn, 1993:56). This might also reflect Belinda’s Montessori training that recommends that teachers ought to observe the children than engage verbally with them as Montessori cautions ‘the educator must, to a the greatest possible extent limit his intervention, yet he must not allow the child to weary himself in an undue effort of auto-education’ (Montessori, 1920). In another observation sessions, as I observed the children in free play my thoughts are expressed in vignette 4 below.

**VIGNETTE 4: Free play with open-ended materials (Belinda’s class)**

...then the children engage in an activity of free choice that the teacher cues its start by removing an item and placing it on one of the children's tables. Each child rushes to the shelf to pick items of choice, (These include empty tubs of domestic consumer products such as; “omo,” blue-band”, “superbrite” containers, etc). Using some item, I hear one child talk about her train, while another has made a stuck of tubs. One girl in particular has heaped blue-band tubs and is symbolically playing at a very high level. She asks another child to “wash” the utensil, and in fact, with an imaginary gesture “pours” some “water” to her tub for use. The receiving girl “uses” the water as the other girl literally moves out, a few steps out of the table, to “fetch” some more “water,” making gestures as if “drawing water from a ‘well’. She simulates the act by pulling up the “rope” as she talks about what she is doing. All the children are free in their choice of how to engage with their loca materials, except a few of them who seem idle, for no apparent reason. Meanwhile all the children go on with this activity for about one hour. The teacher goes round to observe what the children are doing, without any verbalization (borders on disengagement, I think, or just routine!) As they complete the activity, the children return the items to the shelf and swarm around me to engage in conversation. One child asks me how my children are in Kiswahili “habari ya wakati wako?” (How are your children?). I reply in the affirmative. They are very eager to talk to me. One girl (whom I observed as the baby of the class) holds my hand and refuses to let go (I feel captive,[ but I sense a need in her for emotional proximity]-that I cannot continue with my video capture, so I press the “stop” button (well, this is part of research as well, so I tell myself). I engage her in conversation. I ask her whether she will go to my house with me (more to ease conversation, and as part of a routine conversation- fillers when an adult talks to a child in my community), to which she consents. She continues holding my hand, literally making it impossible for me to do anything else. The teacher then asks them to go out and wash their hands in preparation for their mid morning snack of milk and bread. They obey and are soon back to take their snack hurriedly, before dashing out for break for outdoor play; for the next one hour (again, like in all my research classes, I observe a high sense of order and obedience).

Later, I learn that this lovely ‘baby’ of the class is actually an orphaned child, under the care of the paternal uncle. “How sweetly innocent to be young, oblivious of what life could have been”… I think to myself…as I drift back in time, to my own world of a torrent of emotions…Yes, tomorrow is always after all, another day. (Yes teacher Belinda interrupts my stupor as she invites me for a cup of tea, to which I gratefully accept- I am famished!). Nuanced: The children have a truly ‘free choice’ engagement activity; although the teacher does not scaffold any of their activities. Perhaps this is part of quiet time for free choice that inhibits her from “interrupting,” or maybe this is Belinda’s approach to free play.
5.4.3.3 Materials enhance children’s concentration span

“The genuinely healthy child will be always active, he will employ himself” (Froebel, 1899:59).

Belinda’s comment below highlights the need to develop children's concentration span as a foundation for their concentration also in learning tasks:

[BE: They concentrate, we use the bottle tops to count...you will find some other children counting one... others built...they construct things like towers... It helps the child to balance them so it helps concentration also...the child tries to balance the bottle tops, concentrates... the concentration part it helps the child to...pause...to concentrate even more in class...] [BE01:473;477;479;481]

Moreover, Belinda believed that familiar materials encourage children to interact with them more. This might express her belief in the importance of transfer of learning. She also felt that the teachers should aim at making learning materials that are familiar to the children, and which connect home experiences to those found at school. Her comment illustrates this:

[BE: They also see the omo packs at home, so it is just... the things they see; maybe you would want to use the things they know better instead of bringing the things they have never seen...they will take interest to use it but if you bring something, they do not know they will not even touch it] [BE01: 70-74]

For Belinda, open-ended materials offer children unlimited ways to learn, and through free play, individual children gain competence in problem-solving, imagination, creativity and task persistence (Crowther & Wellhousen, 2004:187). Gallagher (2005:18) and Kostelnik et al. (2004:49) observe that children need a variety of multi-sensory related experiences to enhance their brain development. Although Belinda did not allude to the social benefits of play, opportunities to play provide children with a chance to negotiate their own social space as they interact socially with other children (Broadhead, 2001; Katz, 1995:112; Seefeldt & Wasik, 2006:89), while they share the limited play resources. In this way, children develop a sense of being individuals within the community (Prochner et al., 2008:197).

Kostelnik et al. (2004:49) emphasize the significance of social experiences through which “children construct knowledge internally, continually shaping, expanding and...
reorganizing their mental structures”, as they *construct* their knowledge or are *instructed* to gain knowledge. Again, Belinda’s reference to the development of the *concentration span* and *creativity* emphasized children’s cognitive and physical development, rather than their social and emotional development in learning.

### 5.4.3.4 Summary of Belinda’s beliefs about teaching materials

In conclusion, Belinda emphasized children’s engagement with both Montessori and locally available materials. She believed that children develop their creative potential as well as their physical dexterity through the materials, a belief reflected in the way she engaged children with the materials during learning. As mentioned above, she was able to use a nested approach to children’s educational experiences. Therefore, I advance, albeit cautiously, some reasons that might have contributed to Belinda’s nested approach.

I presume that Belinda’s unique approach relate to her experience. Her ‘ideal’ approach to teaching was due to her two-year experience in the field, a short duration that had several implications: firstly, it suggests that she might still *uphold* the ideals of child development. Secondly, she had not experienced ‘colleague pressure’ that would require her to revise her teaching approach. Thirdly, being in her second year of teaching preschool in general, and this school in particular, she has not presented children for interview, which would have pressured her towards teaching for academic success. Fourthly, as a teacher responsible for this class, with the assistance of the head teacher, she probably experienced a psychological *cushioning* from parental pressure, because she was not dealing with parents directly in her position as a junior teacher. In addition, as an employee of the university she did not experience a similar level of pressure to retain her employment by focusing on academic subjects. Finally, the head teacher’s assistance to Belinda was advantageous in easing her workload, especially that she had only 15 children in her class, which made it easy for her to engage them. It appears from Belinda’s experience that she was yet to experience real ‘high pressure points’. This, I argue, explains why Belinda used an embedded approach to children’s learning.

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39 Belinda was the most recently graduated teacher with only two years teaching experience as compared to her colleagues who had between 9-12 years. She is also Montessori trained, working in a DICECE preschool. Currently she co-teaches the same class with the school head teacher.
Belinda’s experience contrasts with that of the other teachers in the study[^40], who had more years of teaching experience, taught their classes alone, and who had presented children for the Standard One entry interview. Moreover, the remainder of the teachers mentioned that they experienced colleague influence to vary their content and method. Montessori teachers are employees of the parents. All the factors that differentiate Belinda’s approach to use of an embedded approach, and the silence of materials in the other classes, are ecological factors, which I will connect to the four levels of the bioecological theory as I link teacher-practices to a meta-theory in voyage seven. In the next section, I consider beliefs about the approach to scheduling of children’s activities as part of accessing an holistic view of the DAEP.

### 5.5 THEME 3: SCHEDULING OF CHILDREN’S ACTIVITIES

The act of planning involves purpose, organisation, foresight, preparation and deliberate decision making (Kostelnik et al., 2004:67).

Two approaches will guide my discussion on the nature of scheduling observed: the general structure of the schedule and the subject-based approach to the children’s educational experiences. MacNaughton and Williams (2004:41) define scheduling “as a teaching technique, [which] involves taking decisions about how to organize the tempo and duration of current and future interactions between children, between children and adults, and between people and materials”. Scheduling in early childhood settings is an important strategy of using children’s time at school in productive ways, besides providing security as part of school routine (Seefeldt & Wasik, 2006:141; Warner & Sower, 2005:221). Seefeldt and Wasik (2006:141-142) discuss two approaches to plan the children’s school day, namely the schedule approach and the general framework approach. In the former, the teacher-directs and determines the general activities of the day, while in the latter, the teacher directs movement from one activity to another, but with the children determining the pace of the activity. Figure 35 (below) illustrates a summary of the observed approach to scheduling.

[^40]: Although Lenora was an employee of the University, she expressed her fears about losing children to other schools that perform better, and the possibility of losing her employment. Stella and Enid seemed concerned about meeting parents’ expectations. See the discussion in voyager 6 for an elaborate perspective of the ‘pressure points’.
<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling</td>
<td>Sequenced presentation (introduce with example, give task, assess task, end the subject)</td>
</tr>
<tr>
<td></td>
<td>Scheduled subject-content (math, English, Kiswahili)</td>
</tr>
<tr>
<td></td>
<td>Forecast completion (each approximately 30mins per subject).</td>
</tr>
<tr>
<td></td>
<td>Scheming and use of daily diary</td>
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</tbody>
</table>

**FIGURE 35: A summary of scheduling experiences**

In the current study, all the teachers blended both the general frameworks approach and the schedule approach in a variety of ways. However, apart from Belinda’s class, in which children engaged with materials, the other teachers focused on a subject-based approach, nested within both the general and schedule approach to children’s educational experiences. Figure 36 (below) portray teachers’ approach to scheduling.

**FIGURE 36: A summary of teachers’ approach to scheduling**

Teachers using the weekly focus adhered to the general frameworks approach, to determine the overall content of the activities. The arrow that runs up emphasizes how the teacher decided on the subjects to cover, and sometimes the materials for children to use (as illustrated by Belinda’s cuing strategy to remove or take back the materials to the cupboard). The scheduling approach used a subject-based approach, by which children...
moved from one subject to the next. Free play fitted within Belinda’s general plan as it was also teacher-directed.

**5.5.1 SCHEDULING OF CHILDREN’S TASKS: THE GENERAL NATURE OF PLANNING**

“Schedules and routines provide a sense of order, safety, and security for both children and adults” (Seefeldt & Wasik, 2006:72).

The following section addresses the way the teachers organised their schedule from a general framework approach. Establishing routines and schedules helps children to adapt to continuity as well as predictability to their school time (Bottini & Grossman, 2005:275; Kostelnik et al., 2004:147). It also serves as a behaviour management strategy (Cassidy & Lawrence, 2000:198; Seefeldt & Wasik, 2006:115). All teachers had specific schedules as they emphasized:

| EN: What I am going to teach, eeh today I have started with English then tomorrow I am thinking of starting with Kiswahili Normally, I usually give myself around thirty minutes in every subject. || EN01:153-155; EN01:275 |
| BE: You just plan that today I am going to have language; tomorrow I will be having maybe free choice. You just plan it yourself || BE01:295 |
| LE: Tomorrow I... the lesson plan or the scheme of work, will not control me because these children I have to take care of them; I must see that they have understood what I taught yesterday...I would have to repeat || LE01:376; 378; 380 |

All the teachers in this study organised the schedules on a strict on-time schedule, allowing little or no variation to the children’s educational experience. The teachers’ comments illustrate a teacher-directed schedule. Belinda and Lenora mentioned flexibility, but this was not reflected in what they planned for children. They commented:

| BE: When you see that the children have they get less concentration on whatever you are telling them, you just change to another activity...so you use the time that you see they can concentrate; so when they do not concentrate, you break into something else || BE01:267; 410; 412 |
| LE: Tomorrow I..., the lesson plan or the scheme of work, will not control me because these children I have to take care of them; I must see that they have understood what I taught yesterday...I would have to repeat || LE01:376; 378; 380 |
Therefore, despite flexible thinking expressed by Lenora and Belinda about their plans to accommodate children’s tempo and interest, this did not translate into children’s educational experiences. Even with Belinda, who used variable learning approaches, the schedule still focused on variety within the group. The teachers’ comments illustrate how a subject-based approach might limit their flexibility in scheduling to accommodate individual children’s tempo and interests. As observed, in most instances, the teachers used a group approach to teach, which required the children to engage with similar activities at the same time.

A developmentally appropriate plan embraces the ecological context of the classroom, in relation to family and community, as well as individual differences of children’s ability and their tempo of learning (Seefeldt & Wasik, 2006:141). Therefore, a child-friendly schedule is likely to embrace specific activities that develop the whole child, have measurable objectives, and content that children need to learn using appropriate materials (Kostelnik, 2004:67). A developmentally appropriate schedule incorporates variety in the learning tasks, and supports individual as well as group activity as it also includes balance between child-chosen and teacher-directed activities (Kostelnik et al., 2004:147-149; Seefeldt & Wasik, 2006:72).

Apart from embracing a timetable for routine and predictability (Seefeldt & Wasik, 2006:115), the teachers had specified content to focus on as part of the day’s activities. The prescribed content increased the schoolwork for children to the extent that the teachers believed they had to rush them through the learning activities due to lack of adequate time. Stella’s and Lenora’s comments exemplify this interpretation:

\[[ST: because you see here in [Tumaini] you have to teach numbers even up to hundred (100) [ST03:820-01].ST: Take away all sums vertically and horizontally, reading both Kiswahili and English, fluently, Like, things like sentences][ST03:822-01]\]

Therefore, the subject-based, group approach to scheduling reinforced the rigid schedule observed. This finding adds to the voice of Geist and Baum (2005:31), who caution that despite the ‘text-book approach’ to teaching, teachers still need to adopt the recommended curriculum to children’s needs. Concerning the rush through content coverage, they warn that “children lack time to gain any deeper understanding”.
Rigid schedules either exclude or rush children with a slow tempo through the learning activities, since such plans might not accommodate them (Geist & Baum, 2005:31; Gallagher, in Gallagher, 2005:16). As observed, the high schedule appeared to exclude children with slow tempo, since a “fast paced approach may interfere with real learning” (Gallagher, 2005:16). In addition, Fosnot (in Geist & Baum, 2005:31) advises that some children will fall behind, while others are likely to be ahead of the textbook approach, in which case it disadvantages both groups. Gallagher (2005:16) and OERI (in Geist & Baum, 2005:31) propose that children need unhurried time to develop problem-solving skills.

In this study there were rigid schedules that gave little variation to what the teachers had planned. This rigidity was evident during one observation where a grass mower-tractor arrived to cut grass at the Montessori preschool compound. Despite the children’s curiosity about the presence of the tractor, the teacher went on with her planned lesson, notwithstanding a foregone “teachable moment” in the “incidental learning opportunity” potentially provided by the lawn-mowing experience (Klein & Chen, 2001:31).

Neuman and Roskos (2005:26) conclude that long hours of routine work for children reduce their motivation to learn. Therefore, although the teachers’ group approach to children’s educational experiences maximized their time at school, these strict-on time schedules, where children had very limited flexibility for their own chosen activities (Miller, 2005:258; Miller & Smith, 2004:126), was less motivating for them, as they engaged in “boring kindergarten seatwork” (Goldstein, 2007b:390). This observation corresponds to Li’s (2003) study, in which teachers emphasized on-schedule approach to teaching. Jingbo and Elicker (2005:140) observe from their study that the routine of ‘educators’ and ‘educated’, portrayed teachers who were more concerned to cover their pre-planned routines at the expense of attending to children’s emotional needs. Burts et al. (in Charlesworth et al., 1993:18) concluded that that workbooks, waiting and transition were the most stressful activities for children. In this study, teachers’ emphasis on written work and interview certainly negated emotional needs of children.

5.5.2 SCHEDULING OF CHILDREN’S TASKS: SUBJECT-BASED PLANS

“The younger the learner, the larger proportion of time should be allocated to informal activities” (Katz, 1995:114).
Another sub-theme that emerged from scheduling was the use of a subject-based approach. As opposed to thematic teaching, the teachers organised the children’s learning schedules by subject content. Therefore, the teachers seemed to emphasize their belief that children should be engaged in similar educational activities at any one time, using predominantly teacher-directed activities.

<table>
<thead>
<tr>
<th>ST: …if I am doing math, I would like all my children to be doing math, not the rest to be doing English, the rest will be... you know, these are small children][ST01:329]</th>
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<tbody>
<tr>
<td>EN: When I introduce number one up to 10, the time I am introducing 11 to 20 I will have to introduce it as a group. I will not take one at a time; because if I leave this child behind, the other one will go ahead and this one will remain there, and then when, the parent come][EN02:434; 439]</td>
</tr>
<tr>
<td>BE: You know you have to teach the children mathematics, language, so also you have to plan for that. Also, general knowledge; like they learn parts of the body][BE01:420-425]</td>
</tr>
<tr>
<td>LE: So I divide if it is one hour reading and the following hour is writing][LE02:557-561]</td>
</tr>
</tbody>
</table>

All teachers’ comments reinforce their preference for structured subject-based content (Foote et al., 2004:141; Jambunathan & Caulfield, 2006:256). Their approach contradicts a DAP framework plan that recommends a variety of learning approaches for children, including exploratory play, guided discovery, problem-solving, discussions, demonstrations and direct instruction to incorporate both child-initiated and teacher-directed learning opportunities (Hujala, 2002:101; Kostelnik et al., 2004:82; Seefeldt & Wasik, 2006:141). Instead, it reflects the observation by McMullen et al. (2006:87) that teachers in traditional classrooms are likely to use pre-planned schedules, within teacher-directed approaches.

Stipek (2004:552) cautions that teachers prefer scripted teaching in which they use prepared materials, rather than handle individual differences or use ‘a prescriptive curriculum’ (Charlesworth et al., 1993:14). Moreover, for teachers to embrace a DAP approach, which requires them to plan continuous assessment of the children, do an ongoing development of the curriculum, and have constant interactions with the family is a challenge (Geist & Baum, 2005:33). Charlesworth et al. (1993:14) conclude that teachers who are accustomed to a prescriptive curriculum struggle to implement a DAP flexible approach.
While planning is a useful measure of accountability by the teacher, too rigid a plan will negate children’s disposition to learn by manipulating materials. Since children are still young, they require learning through play (Gallagher, 2005:16), as they are also fascinated with the tasks before them (Seefeldt & Wasik, 2006:140). In addition, a fast schedule will frustrate children with a slow tempo in their task-completion. The teacher will also feel stretched to cover content in her weekly focus. Moreover, long periods of teacher-directed activity are stressful for the children (Charlesworth et al., 1993:14). The whole group, non-variable and teacher-directed schedules that characterised the observed lessons in the study, contrast with a DAP schedule which should facilitate children’s individual differences in tempo and ability (Kostelnik et al., 2004:89; MacNaughton & Williams, 2004:46). Variable group activities can also qualify as DAP if they precede activities where children apply conceptual information supplied by the teacher during whole group activities (Fowell & Lawton, in Charlesworth et al., 1993:14). Neuman and Roskos (2005:25-6) conclude that long hours of worksheets might not be fruitful for children’s overall literacy development. The section following is a general discussion on children’s tasks.

5.5.3 SCHEDULING OF CHILDREN’S TASKS: A GENERAL CONCLUSION

In conclusion, the teachers’ concern to cover content examined at the primary entry interview affected their schedules. To prepare children for transition to standard one, and to pass the standard one interview, was the concern of both top class teachers. To illustrate, Enid scheduled for thirty-minute lessons as she comments, [EN01:153; also vignette6], using a subject-based approach, which she concludes with a written assessment. Stella emphasized the rush in her words:

[ST: ‘we just introduce the sounds, quickly into two letters double sounds quickly to three letter words, quickly to sentences…’][ST03:405; 411-2]

Concerns about the haste expressed by the teachers in the current study are consistent with the findings by Cassidy and Lawrence (2000), that teachers in their sample rushed their children through the different tasks to protect them from boredom. In addition, Goldstein (2007b:387) concludes that the standards expectations limit Kindergarten teachers’ content selection. However, the rationale differs from those given by the teachers in the current study, who covered as much writing content as possible to remain
accountable to parents and to prepare children for the assessment in the transition interview. The findings from this study echo those of Jingbo and Elicker (2000:139), that teachers in their sample focused on pre-planned routines that disregard the feelings of children.

Nevertheless, because of the highly structured schedule, children in these preschool classes displayed positive affinity and cooperation with the teacher, who kept them occupied. Seefeldt and Wasik (2006:115) observe that since routines and schedules imply expected behaviour, planning is an effective discipline strategy. My observation contrasts with Winsler and Carlton’s (2003) finding that children in their study spent less time in focused learning activities, showing less sustained attention to tasks.

All the teachers concurred that they were autonomous in their planning, in contrast to the finding by Wang et al. (2008:244) that their Chinese preschool sample sometimes changed their teaching plans to reflect their directors’ beliefs. A discussion of the assessment practices follows in the next section.

5.6 THEME 4: APPROACH TO CHILDREN’S ASSESSMENT

5.6.1 INTRODUCTION

In addition to learning more about how individual children think, learn, develop and behave, educators need to collect and document information to inform instruction, to identify children who might benefit from special help or additional health services, and to report children’s progress to their families (Kostelnik et al., 2004:183-184).

In the current study, the discussion on assessment is limited to its forms observed in children’s educational experiences. The teachers’ assessment embraced two approaches, namely choral reading and task completion, differentiated among children in the baby class, but undifferentiated among those in the top classes. Language tasks included identifying UPPER CASE and lower case letters, matching words and their pictures or objects and their functions, and filling in the missing letters. Children engaged in these tasks on a rotational basis. The teachers’ illustrate their approach to assessment:
All the children’s assessment focused on a subject-based approach, as illustrated in section 5.3.3, regarding the teaching strategy embracing copying and task-completion. Their views illustrate a link to these activities to assessment:

[LE: So it is good to be on the chart so that when that child is defeated can just turn back and see so that they may rewrite so that I can know the child that has known][LE01A:1052; 1064]

[ST: I write the numbers and ask the children to read, so that I will know the child who still has a problem with recognition of numbers, eeh but this one automatically is based on number recognition] [ST03:216; 218-01]

[EN …and when it comes to dictation, most of them are weak in spelling. When I ask each one of them to see how fast they are in spelling, because when you do it every single day, you will see that they participate more often][EN01:284]

Children also had written task-based completions as illustrated in figure 37 and 38 from Montessori and DICECE classes respectively. It appears that the teachers assessed children for their cognitive competences, such as ability to recall, associate, and count correctly, read correctly, recognize numbers, among other subject-based cognitive-skill oriented assessment. It appears that assessment focused on ‘academic’ subjects or aspects of cognitive. The teachers rarely talked about other non-cognitive related assessments, apart from Stella who believed that assessment serves to screen children with disability [ST: so that you cannot, you know about the child if the child has disabilities or … [ST02:71].
<table>
<thead>
<tr>
<th>Class</th>
<th>Forms of assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-themes /classes</td>
<td>On the spot group choral reading</td>
</tr>
<tr>
<td>MONMID</td>
<td>Picture/colour identification, capital and small letters</td>
</tr>
<tr>
<td>MONTOP</td>
<td>Choral reading; [tough, bat, box, aunt etc.-; ‘I have a pen; what is your name; they can sing-see images 6-10]</td>
</tr>
<tr>
<td>DICTOP</td>
<td>Picture-reading, number reading, word-rhymes, Kiswahili syllabic reading, read the following sentences [the ball is big, come to the car; the ship has shut the door] etc (see addendum 12 and additional images on CD)</td>
</tr>
<tr>
<td>DICMID</td>
<td>Choral reading [a for-; letter b for- etc.]; colour identification, [D1S1] (see additional images on CD)</td>
</tr>
</tbody>
</table>

**FIGURE 37:** Children’s assessment experiences: - Montessori preschool

All teachers used paper-and-pencil and letter recognition forms of assessments, which are by nature limited in providing a comprehensive appraisal of children’s progress (Seefeldt & Wasik, 2006:149). Seefeldt and Wasik (2006:149) note that “all young children [under Nine years]…have limited vocabulary skills, are unable to think abstractly, and their understanding of the world is coloured by egocentric thinking”. Therefore, it is unlikely that one method of assessment can give an accurate appraisal.
By focusing on children’s written tasks that were marked at the end of each lesson, the teachers contradicted a DAP approach to assessment which should use variable approaches. These include the use of checklists and rating scales, various forms of observations, unstructured interviews, children’s work samples, and portfolios, in addition to performance standards benchmarks, as multiple ways of assessing children, not only for their learning tasks, but also for their behavioural dispositions (Seefeldt & Wasik, 2006:148-150; Geist & Baum, 2005:33). Kostelnik et al. (2004:183) write that:

...[because] children think, learn, develop and behave across time, educators need to collect and document information to inform instruction, and identify children who might benefit from special help or additional health services, and to report children’s progress to their families.

However, the foremost concern for the teachers is to equip children with functional literacy as part of effective educational experiences, as succinctly expressed by Lenora:

\[
\text{LE: That we give children such work or we so that the child may know the capital letters and to differentiate small\[letters\][LE02:196]}
\]

Also evident from this study is that the participants believe that assessment should provide feedback about children’s learning needs, as it also gives feedback to their parents. Although a DAP approach to assessment recommends that preschool teachers should embrace authentic assessment to appraise children’s developmental domains for future learning, (Kostelnik et al., 2004:187; Seefeldt & Wasik, 2008:149), teachers in the current study predominantly used a content and subject-based approach to assess children’s educational experiences. This approach limited assessment to the children’s cognitive abilities necessary for school transition, through worksheets and reading ability, thus excluding talents such as musical, artistic and any other domains of development that are non-cognitive.

The teachers in the current study restricted their assessment of children to academic tasks, reflecting a similar finding by Li (2003). They believed that children should acquire skills-based knowledge related to early maths and language literacy. However, such an approach undermines children’s mastery, effort and their ability to seek challenging experiences (Katz & Chard, in Katz, 1995:113; Fosnot & OERI, both in Geist & Baum, 2005:31). Therefore, although the teachers also stressed motor development through writing, this emphasis related to the writing as a psychomotor skill.
requisite to written assessments (Kostelnik et al., 2004:349). Their emphasis on academic skills attainment reflects the Indian experience reported by Jambunathan and Caulfield, (2006:256), and the Singapore experience observed by David et al. (in Miller & Smith, 2004:123). However, this contrasts with the Australian experience, where kindergarten teachers downplay academic tasks and focus on socio-emotional skills (Miller & Smith, 2004:123).

Consequently, the subject-based approach to assessment reflects the narrowed down approach to the concepts assessed, even taught, to the cognitive domain only, which exclude the social, emotional and physical domains of development (Neuman & Roskos, 2005:25). For example, Lenora’s comments emphasize how the interview requirements have affected her teaching of mathematical tasks. She exposes children to what she calls ‘vertical’ and ‘horizontally’ arranged sums, which appear to require different levels of abstraction from children (see image 26 {above}, showing vertically arranged sums). In her words, Lenora said this of her approach to develop children’s numerical abilities:

[LE: So that is why I will also try to give them on those different ways that I know so that [when] child…go and meet such sums there, in the interview, they will be able to do them. You see I try to give them these sums I will write them in different ways either the vertical or horizontal …they will give in different ways should be able to identify or know because now when they go for their interview][LE02:78-88]

5.6.2 ASSESSMENT: A GENERAL DISCUSSION

Although a DAP approach to assessment recommends that preschool teachers should embrace authentic assessment to appraise children’s developmental domains for future learning (Kostelnik et al., 2004:187; Seefeldt & Wasik, 2008:149), teachers in the current study restricted assessment to academic tasks, reflecting a similar finding by (Li, 2003). They believed that children should acquire skills-based knowledge related to early arithmetic and language literacy. This emphasis on assessing the cognitive domains also contradicts the standards recommendations in Kenya, that preschool teachers should focus on children’s holistic development (Republic of Kenya, 2006a:14), embracing cognitive, social, emotional and physical domains. Therefore, a skills-based assessment might not reflect its capacity to evaluate realistically all children’s domains of development. Culbertson and Jalongo (1999) argue for an inclusive approach to
assessment beyond paper and pencil workbooks that might not reflect all domains of children’s learning.

In the entire discussion, the teachers did not mention any other skill that children should possess outside of academic tasks. A narrow focus on assessment has implications for the content of children’s educational experiences. For example, observations from this study indicate that children had fewer opportunities to develop their creative talent in the arts. The only artistic observation was in the drawing of their trip experience in Lenora’s class and one other in Stella’s class. The assessment focused more on the ‘do it right’ approach, which undermined their task persistence and competence (Stipek et al., 1995:220; Stipek, 2007). This structured approach does not favour the emergence of creativity, much less the freedom required to think beyond the ‘borders’. Moreover, the development of higher order thinking is limited, because tasks such as simple memory and recall, required children to engage at lower cognitive levels through meaningless recitation (Stipek, 2007:741).

With the exception of Belinda’s’ beliefs and practices that balanced between a child-centred and a teacher-centred approach, despite using a group approach, the rest of the teachers limited children’s assessment to their cognitive domain, using rote-learning approaches (Prochner & Kabiru, 2008:128), such as copying choral chants, simple recall, copying and recognition, matching, and addition and subtraction. The teachers in the current study focused assessment on cognitive-related skills, consistent with the observations by Jambunathan and Caulfield (2006:256), that teachers in their Indian sample preferred paper-and-pencil assessments, but which also seemed to reflect the predominant Indian culture inclined to didactic instruction and learning. This level of assessment undermines learning-related behaviours, such as motivation and competence (Stipek et al., 1995:220).

A focus on academics originates from a demand for children’s literacy-based learning which limits learning to the acquisition of the 3Rs (Pui-Wah & Stimpson, 2004; DeVries, 2002; Kieff & Casbergue, 2000). In my view, this is a readily accessible approach to accountability, whose assessment is open to short-term appraisal. For instance, it is easier to access the 3Rs than it is to assess a child’s emotional development. In addition, stakeholders value the cognitive focus in children’s learning more than the child
Voyage 5: Children’s educational experiences and emerging teachers’ beliefs

development domains. However, this ‘one-shot’ approach to testing, is likely to demoralise children in their learning (Isenberg & Jalongo, in Culbertson & Jalongo, 1999).

Vartuli (1999:508) conclude from their study in the US that teachers’ failure to embrace DAP reflects the pressure they face from local state mandates, school culture and peer pressure. Findings from previous studies resonate with the Kenyan experience, where focus on assessment at the primary and secondary school level has influenced preschool practices on assessment, creating ‘the elementary error’ in which approaches used for children at higher levels is thought appropriate for preschool children (Bredekamp & Rosegrant, in Charlesworth et al., 1993:11).

Therefore, the focus on academics is not surprising in the Kenyan context, where academic performance in a competitive primary school system and entire school system in general, has influenced the observed narrow forms of assessment towards children’s education experiences (Biersteker et al., 2008:243; Mwaura et al., 2008:128; Prochner & Kabiru, 2008:128). The Kenyan experience reflects experiences elsewhere, such as the practices in India (Jambunathan & Caulfield, 2006:256), South Korea, and Taiwan (McMullen et al., 2005:453-4).

Notwithstanding the focus on assessment on a subject-based approach, a positive social and emotional climate characterized all the classes in the study. The positive social and emotional climate resulted from a highly structured environment, in which children were always on-task, leaving them with little space to display negative emotions. The behavioural benefits of a skills-based approach to children’s educational experiences observed in the current study correlates with an observation by Massetti and Bracken, (2008:10), that children in a skills-based environments displayed few social and behavioural problems. This contrast with research that found children’s negative social and emotional behaviour are related to teacher-directed classrooms (e.g. Stipek et al., 1995:220). However, the positive outcomes observed in the current study contrast with those by Charlesworth et al. (1993:21), that children attending DIP classes experienced more stress. Although the current study did not measure levels of stress among children, they displayed less negative behaviour throughout the study, teacher-directed activities notwithstanding.
The teachers’ approach to assessment confirm previous studies that teachers tend to focus assessment on the areas that the larger society values (Pretti-Frontczak, Kowalski, Barr & Brown, both in Kowalski et al., 2005:24). The latter’s findings on assessment indicate that preschool teachers tended to value those skills assessed by national tools such as their MAPS (Measurement and Planning System), which is used to measure accountability outcomes in the USA (Kowalski et al., 2005:31). In addition, Timperley et al. (2004:35-6) suggest that there are disparate expectations of skills required for transition to primary school between kindergarten and primary school teachers. Whereas the former group value skills-focused teaching over socio-emotional skills, the latter group value socio-emotional skills.

The focus on the cognitive tasks tested by the primary entry interview is a good preparation for the children to cope with the immediate primary school and beyond. It was evident from the observations that, although the content covered, for example in mathematical skills, was above the ability of five-year-olds, the children, especially at the top classes, did not struggle to complete them, rather completing them swiftly and correctly most of the time (see images 6-10 {above} for an illustration of the correctness of tasks). In the following section, I discuss the theme on children’s individuality.

5.7 THEME 5: CHILDREN’S INDIVIDUALITY

5.7.1 INTRODUCTION

“Today’s classrooms are melting pots of children from diverse backgrounds” (Seefeldt & Wasik, 2006:60).

This section discusses teachers’ beliefs about children’s individuality, after examining their beliefs about children’s individuality. It concludes with a general discussion that incorporates literature on children’s differences. Each child is a unique individual, in line with Muscari’s (2006:75) definition of uniqueness as “what makes a person an individual and allows her [him] to express herself [himself] in her [his] own way”. Consideration of children’s individuality embraces the principle that there are inherent differences among children because of their diverse social, emotional, physical and cultural backgrounds (Jalongo et al., 2004:144; Klein & Chen, 2001:31; Kostelnik et al., 2004:51). Muscari (2006:76) further notes that variety among children is inexhaustible, since it embraces multiple dimensions. Klein and Chen (2001:31) argue that a DAP approach to children’s
education intricately links not only to the cultural setting, but also to backgrounds, abilities and interests of children.

5.7.2 Teachers’ beliefs about children’s individuality

The teachers in the study acknowledged that children differ in their cognitive and tempo ability besides inter-cultural differences, which in turn affects their learning dispositions. From their comments, the teachers believed that since children display differential ability, they should be sensitive to these differences. Figure 39 (below) illustrates some of the teachers’ beliefs about children’s tempo.

**Figure 39: Teachers’ beliefs about children’s tempo**

The teachers’ comments illustrate how children’s learning tempo and cognitive ability affects their teaching. For example, from the following illustration, Stella’s comment suggests that she uses repetition to address the learning needs of children with difficulties. The following sentiments illustrate teachers’ beliefs about children’s individuality:
Referring to children participating in choral activities, Enid and Lenora differentiated among children in their learning tempo and approach to learning tasks, while Belinda thinks that when children engage with different activities, she gets time to attend to individual children as their comments suggest:

[EN: Therefore, we take every child according to how they have been doing their work. Maybe this one was fast enough in learning sounds, so introducing letters to that child is much easier][EN04:114-01]

[EN: ...even when you are introducing something to her you have to go slowly by slowly you are not supposed to force her because if you force her she will get even more confused...][EN02:278; 286]

[LE: I just do not just give them work...I explain, if it is the work of changing from capital letters, changing from Kiswahili to English, I have to explain][LE01 162:02]

[BE: when you give children different [activities]...you get time to attend to each child...maybe you can go round each child telling him or her, what he or she is supposed to do][BE0:386]

However, Lenora’s statement that children with learning difficulties learn at the discretion of the teachers, suggests that learning environments in Kenya preschools might not support children with learning differences. She noted:

[LE: The fast learners will catch and they will do their work, and the slow learners, they will not catch because they still need to be attended to, individually][LE01:152-02]

Moreover, the interview requirements tend to impose similarity, rather than tolerate differences in children’s ability. Lenora suggested that the there was no space for children with learning differences in the system, reiterating her discretion to include learner with difficulties. Stella emphasised the inherent differences among children,
while Belinda would attend to children’s differences in learning tempo, as Enid would do likewise.

Although teachers indicated that they are autonomous in planning for children’s experiences to take into consideration their individuality, they preferred a group approach to an individual one approach, leaving little room for children to express their individuality as illustrated in vignette 6. Group tempo expressed during whole class activities such as when teachers took children through the choral reading activities (individual tempo emerged during free-play, in Belinda’s class). Differentiated tasks emerged when teachers assigned children differential tasks to complete. However, although children’s differentiated copying and task completion assumed a lesser difficulty level, the demand might not have considered children’s ability level from their maturational or developmental perspectives. The teachers’ comments about children’s individuality follow in figure 40 below:

**Beliefs about handling individual differences**

<table>
<thead>
<tr>
<th>Teachers’ sentiments</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ST: I gave them different activities, or in math different, in Montessori, we teach our children according to their ability…, so their work will not be the same, there will be a difference… [ST01:45]</td>
</tr>
<tr>
<td>[LE: They are those fast learners…to put them in one group they are those who are slow learners I group them together [LE02:264; 266]</td>
</tr>
<tr>
<td>[BE: Because if the child is a quick learner, you will have to go like that and if she is slow, you will have to take him slowly…at this time now, we have to force the children to know [BE01:548-558]</td>
</tr>
<tr>
<td>[EN: You will concentrate with them and you will know what is wrong…what they don’t know and may be you will teach and make them understand what they couldn’t have gotten when they are in a group [EN04:96; 98; 100-01]</td>
</tr>
</tbody>
</table>

**Figure 40:** Teachers’ beliefs about handling children’s individuality

I observed what appeared to me to be a frustration to the teacher with the children’s differential ability to cope with these tasks correctly. The following vignette (five, below) captures my thoughts in one of Stella’s classes, as I wrote in my journal:
VIGNETTE 5: An illustration of group tempo in learning tasks (Stella’s class)

At 9-10, the teacher directs the children to change over to another activity- open to all the children. The activity involves copying letters.

10-11: the children are involved in another activity of individual paper work of math. This activity involves the children completing tasks that the teacher has already copied to their exercise books. I wonder why the teacher does not give them opportunity to write the work by themselves as a way of learning by doing. Clearly, the children are yet to grasp the concepts taught because the teacher is intensely involved with individual children; asking them-sometimes harshly whether they really know what they are doing. Most of the time, the teacher is asking the children to rub the work and start all over again.

My nuances:
In my view the child whom the teacher has just asked to rub all his work and re-do, looks to me to be physically frustrated, from the visible frown on his face. The teacher could be equally frustrated as discerned through her tone of voice. In my view, only a few children have managed to do the work with ease. Otherwise, the activity seems to me, to be well beyond the children’s ability because most of them have had to rub the work to re-do or are simply doing the wrong thing. The teachers’ tone of voice sounds harsh and frustrated; using such words as “don’t you know how to write this? ‘Is this how to write it?” “Take the rubber and rub this quickly.

Further vignette 6 (below) illustrates disregard for children’s individual tempo and general ability. In addition to the individual differences based on children’s variable tempo, Stella perceived social differences among children, which she referred to as ‘social privileges’. She remarked:

...if a child maybe comes from let’s say around the staff area [University environment] that child can even greet you in English… I have also to express it to the rest, maybe in Kiswahili… and action so that they can understand] [ST02:27-37]

Consequently, Stella expressed belief that children’s social and cultural backgrounds, which affect their readiness to learn, should guide teaching. Apart from cultural variations, Stella suggested that children’s linguistic readiness also affected their grasp of learning concepts. Emphasizing this difference, she observed that children who come from the rural areas have limited exposure to the English language and so require the use of both verbally propped gestures to simplify their concept attainment. She reiterated her belief in using a more sensitive approach to making learning inclusive for such children. Stella’s comments resonate with caution by Klein and Chen (2001:17), that the socioeconomic status of children, which privilege them with certain experiences, invariably affects their interactions and participation in the preschool programme.
However, from the observations illustrated by vignette 5 and 6 below, Lenora, Enid and Stella did not create room to embrace children’s individual abilities in the learning process. Their approach contrasts the advice that curriculum activities should consider children’s ‘transient abilities’ (Jalongo et al., 2004:145).

**VIGNETTE 6: Tempo of group activities in Enid’s class**

> I arrive slightly late today for my observations, because the taxi [matatu] that I used today stopped midway for about thirty minutes to fill up. As an ‘economical’ habit that many would-be-in-a-hurry passenger abhors, the taxi has to wait for prospective passengers indefinitely, sometimes to the chagrin of the already late travellers. For us today, fifteen minutes into waiting, the taxi is hardly half-full. Only three more passengers have joined us; eight more to capacity or up to twenty if overladen. It is only after a few of us start agitating that the taxi moves, albeit grudgingly. It is already half eight, twenty kilometres away and thirty minutes later than scheduled!

> I arrive at the school at nine past nine. I dash into class because the teacher is expecting me. As soon as I arrive, she asks the children to go to the toilet, beginning with the boys, followed by the boys. They spent another five minutes in all (mmm, gender sensitive she is!). Meanwhile, the teacher is copying work on the blackboard (Kiswahili), after which she reads aloud with the children, before distributing children's exercise books for a written task where they will draw the word and the pictures. Some of the children have already finished the work, even before the last child gets her book (looks like the children are very much at ease with the activity, there are no signs of struggles). As they complete the exercise, the children bring their books for marking. After that, they go sit, no added work or further instructions, as the other not so fast children complete their task.

> Some of them are talking among themselves after completing their work; I can see two boys actually conversing cheek to cheek. At some point, the teacher asks one child to remain behind when the other children go for break because he has sat sideways on his chair (Perhaps depicting impatience), ready to dash for tea! In fact, she tells the child that he will take his tea last, as a punishment! The teacher then asks the rest of the children to suspend their work until they have taken their tea. True to her word, she releases the boy who had wanted to rush for his tea last, to join the others for tea. He is visibly feeling very bad. In fact, he has missed his slices of bread, so he has to wait for the tea girl to bring in more slices. She then changes over activity to construct words beginning with sounds c, d, f, m, e, n, r, y, j, s, oo, ee, all, ow, ie etc. The children go on with the activity without much ado. They are very comfortable in the activity. However, the children do not seem challenged at all in what they are doing. I think it is more of a routine activity requiring them to recall. The teacher does not explore other levels of the children's abilities, such as creativity.

> Nuanced...

> The teacher makes an effort to correct inappropriate behaviour and as a result, children seem very orderly and disciplined. They obey authority unquestionably. Earlier in the day, the teacher displayed gender sensitivity by asking the children to go to the toilet beginning with the boys, or was it gender discrimination? Well, at another time, she asked a child to clean his nose and to bring an handkerchief the following day; otherwise, she would send him back home if he comes without it. (Although I think sometimes, she is very harsh and uses a terse tone). The children who finished their work early did not receive additional work either, and I think they showed signs of boredom. While others lay their heads on their tables, others conversed in low tones.

**5.7.3 CHILDREN’S INDIVIDUALITY: A GENERAL DISCUSSION**

As illustrated in the teachers’ comments, three broad dimensions of differences define developmentally appropriate classrooms that respond to children’s individual differences, namely *interpersonal* rates, *intrapersonal* rates, and *intercultural*
differences. Apart from developmentally related differences, children also display intercultural differences that teachers should respect (Jalongo et al., 2004:144; Klein & Chen, 2001:17). Therefore, teachers ought to be sensitive to various forms of diversity and use them to plan for children’s learning activities (Kostelnik et al., 2004:44). However, Stipek (2004:561) suggests that handling differences among children is difficult. The ‘whole group’ approach used by the teachers in the study reflected the methods used by primary grades observed by Vartuli (1999:505), that first and third grade teachers were less developmentally appropriate than were their head start and kindergarten counterparts.

The theoretical support for children’s individuality among teachers did not match their practical approach to embrace individual differences, which include tempo, personality and cultural diversity. The teachers’ thinking echoes one of the current developments in early childhood education that advocates an inclusive approach, where all children, regardless of social status, physical ability and economic disadvantage ought to benefit from learning opportunities (Gordon & Browne, 2000:207; Klein & Chen, 2001; Kostelnik et al., 2004:18).

Therefore, since children vary in their cognitive abilities and learning tempo, classrooms ought to be responsive to their individual needs to embrace children’s variable intrapersonal and interpersonal abilities and approach to learning tasks (Gordon & Browne, 2000:207; Kostelnik et al., 2004:51). Consequently, each child needs to experience success through individualized goals (Seefeldt & Wasik, 2006:115). Klein and Chen (2001:28) stress that a child will develop optimally when there is a balance between the physical and social environment and their individual abilities and interests.

Conversely, except in a few areas, such as choral reading where children decided whether to lead others, the three teachers’ beliefs about children’s individuality did not match their practical approach. The need for variable free choice activities to reflect a DAP approach was lacking (Jambunathan & Caulfield, 2006:256; McMullen et al., 2006:87; 2005:454; Miller & Smith, 2004:126). Moreover, despite children’s differentiated tasks, faster children set the tempo for learning tasks, while children with a slow tempo struggled to cope or to catch up on their completion tasks. The teachers decided on the duration and content structure of learning, and their beliefs about
children’s individuality contrast with the findings by Wang et al. (2008:243), that teachers’ beliefs in their sample were influenced by, *inter alia*, children’s characteristics.

5.7.4 **A SUMMARY OF TEACHERS’ BELIEFS ABOUT DAEP**

This section addresses the study findings on children’s educational experiences and the emerging teachers’ beliefs on five constructs related to DAEP; teaching strategy, use/silence of materials, scheduling of children’s educational tasks, assessment and the consideration for children’s individuality, in a Montessori and a DICECE preschool. However, the study does not examine the differences inherent to the participants, but rather provides a general perspective of their practical experiences, and the emerging beliefs relating to the DAEP constructs. Figure 41 (below) illustrates a summary of teachers’ beliefs of DAEP.

**Figure 41:** A summary of teachers’ beliefs of DAEP
Teachers expressed beliefs consistent with a DAEP approach that supports a child-centred approach to educational experiences. However, their beliefs contrasted their practices, as reflected in children’s educational experiences that did not embrace the DAP principles related to children’s learning. The teaching strategy embraced teacher-directed approaches focusing on basal skills related to literacy acquisition consistent with the findings of other studies (Jingbo & Elicker, 2005).

The observation that the teachers silenced the materials in all the classes except Belinda’s class, demonstrates a focus on skills-based academic learning which is in conflict with the DAP template that considers an holistic approach to children’s developmental needs which is harnessed through play or manipulation learning materials. Although all the teachers corroborated the usefulness of materials, they believed that there were unique circumstances in their environment that hindered them from using these materials.

Assessment at the preschool is a complicated process, given the children’s inability to express themselves in a multiple number of ways. For this reason, a DAEP approach to assessment requires teachers to focus not only on academic skills, but also on other domains of development, which include the assessment of children’s social skills, physical and emotional development. However, assessment portrayed in the current study reflected a narrow and skills-based approach, focusing on a paper-and-pencil approach. Even when the teachers talked about the children’s physical dexterity, they linked this to children’s ability to complete their educational tasks.

The schedules reflected a teacher-directed, subject-based approach (Jingbo & Elicker, 2006:140), in which the pace and content selection in the top classes was similar for all the children. The children with a faster tempo set the pace for the learning activities. Consequently, the teachers held beliefs consistent with children’s individual differences, even though they did not seem to embrace practices sensitive to such individuality, except when teachers in the baby classes gave children differentiated copying tasks. Therefore, although teachers subscribed to children’s individual differences, their group-based practices negated the principle of diversity, to reflect their strong beliefs, except during differentiated task-completion.
In conclusion, although all teachers held beliefs that reflect a DAP template promoted in early childhood education literature (Republic of Kenya, 2006a; NACECE, 2000; Bredekamp & Copple, 2006; Kostelnik et al., 2004) their practices contradicted their beliefs. Instead, their beliefs were more developmentally appropriate than their practices, due to various factors that might explain the contradictions, as will be discussed in the next chapter. Wang et al. (2008:247) demonstrated that, in general, teachers’ beliefs could vary according to cultural context, professional training, educational level and the size of the class. It is worth noting that even from these practices that might seem developmentally inappropriate, such as choral reading and task completion, there emerged beliefs that negated this position. For example, the teachers believed that task completion was an important transition requirement for children to fit into the primary school. In the next chapter, I consider some of the influences on teacher beliefs and their practical experiences within a culturally sensitive context of the study.

**A brief sojourn after voyage five**

As we ‘saw’ children’s educational experiences and ‘listened’ to the teachers’ beliefs on the highway of ‘teaching strategy’, we saw the children engage in choral reading and written task-based completions. While the rest of the teachers ‘silenced’ the materials in their classes, children in Belinda’s class engaged actively with free play...

Further down the road of ‘planning and use of children’s time, we saw teachers use a general frameworks and scheduling approach...

And as we turned the bend of ‘assessment’, we saw and heard teachers use task-based completions and choral reading to assess ‘academic skills’...

As we journeyed further down the road, we came across considerations for ‘children’s individuality’ as teachers talked about children’s diversity in personality, learning tempo, interest, social and economic background...

However, as we reflect on the past journey, there seems to be discordance between what we saw and heard...

Are there context factors that we might pick on our journey to illuminate our further voyage??? Maybe the next path will lead us into this country’s dynamics of preschool teachers’ beliefs...

So different, yet so similar to the findings of other sojourners
VOYAGE SIX
FACTORS INFLUENCING TEACHERS’ BELIEFS

In the next part of the journey

We explore the teachers’ rationale for the children’s educational experiences and the factors that might influence their beliefs about these experiences...

Join me now ...

to understand more on
the context factors...
6.1 A GENERAL INTRODUCTION

“Formal academic instruction emerged and was reinforced by a particular social and political climate rather than rooted in child development” (Zeng & Zeng, 2005:717).

In this voyage, I will discuss the factors influencing teachers’ beliefs about developmentally appropriate educational practices, which relate to question four in the study: What are some of the factors influencing teachers’ beliefs about developmentally appropriate educational practices?

Although each teacher discussed different factors, a nuanced interpretation portrays various sources of perceived pressure. Therefore, the dominant theme relates to the teachers’ concerns to plan for children’s educational experiences that respond to these perceived sources of pressure that follow in the discussion. Figure 42 (below) summarizes the factors influencing beliefs about the use of DAEP.

![Figure 42: Summary of factors influencing teachers’ beliefs](image)

6.2 RESPONDING TO PARENTS’ EXPECTATIONS

“They [parents and the community] say in that school, they don’t teach!” [Belinda].

“Parents are increasingly under pressure to ensure that their children succeed and survive the education system” (Robinson & Diaz, 2006:51).
The following extracts from transcripts capture some of the sentiments that relate to how the observed educational experiences might reflect the teachers’ response to parents’ expectations:

[BE: They also have to know how to write, because parents expect that when their children come to school... they expect them to know how to write; and to read (silence)...so they are practicing] [BE01:131; 133; 134]. When a parent comes and see a child from another school can write, the child from another school cannot write so they say in that school they don’t teach;][BE01:212-214]

[LE: ...the parents see the school that does well [in the interview] or the school that takes more children to standard one. You see when we teach them and we see that they do not do well, we are (mptts-as in self-sympathy), we find that there is something...parents are not happy if the child doesn’t make [in the interview]] [LE01A:700-708; LE01:106-02]

[EN: Yes, you keep on telling the parent it is not a must for the child to write. The only thing we want is to make that child comfortable and practice with the materials, and then that parent says, no me I brought my child to write and read... When that parent comes to [school] at least goes through the exercise book he sees that’s oh, that my child is writing that’s what they normally do] [EN04:297]

[ST: Maybe if somebody brings a child to baby class after a week or at the end of the day he wants to see that, that the child already has written something, something on a book. Which is very wrong because that child from school has to train even how to hold a, a pen... and, a parent doesn’t know that... Yah okay we are in a community [enlightened] but you see that maybe some will not understand at all] [ST02:226-230; 234-236]

From these statements, it appears that the teachers expressed the perception of their role towards children and their parents in two ways: firstly, to meet parents’ expectation for their children’s learning, and secondly, to prepare children to fit in the primary school by equipping them with literacy skills. The teachers’ beliefs centre on the parents having some sense of urgency for their children to acquire literacy skills. However, teachers limited parents’ expectations to the ‘educational’ role of the preschool, where writing is perceived as the basis of the competence of the child. Therefore, such a perception might explain why the teachers focused on the children’s writing, copying and task-completion, as observed in the study.

In contrast, learning involves more than just copying and task completion (Culbertson & Jalongo, 1999; Kostelnik et al., 2004:327-8; Trawick-Smith, 2003:397; Neuman & Roskos, 2005:23). Children’s learning activities must meet both their developmental needs and serve as skills for standards curriculum (Goldstein, 2007a:396; 2007b), as they enjoy their learning to solve problems (Gallagher, 2005:16) through meaningful literacy experiences (Bredekamp & Copple, 1997, in Neuman & Roskos, 2005:23).
Kieff and Casbergue (2000:42-43), together with Katz (1995:102-103), identify four domains of children’s learning, which include the knowledge domain, consisting of learning facts, ideas, concepts, vocabulary and stories. The skills domain involves learning components of physical, social, verbal and counting skills through observations. Dispositions as a third category of learning involve mastering characteristic ways of responding to situations, which include inquisitiveness, sociability and unfriendliness. Finally, the feelings domain embraces children’s emotional states. Culbertson & Jalongo (1999:130) suggest the use of a portfolio that includes ‘notes about daily achievement, checklists showing areas of strength, child-selected work samples and even artwork and interest inventories that show that the school recognizes talents beyond academics’.

However, in what was a limited perception of the role of the preschool, teachers assigned a cognitive role to it, where children had to be ‘reading and writing’. In my view, this ‘academic view’ of the preschool limits the range of activities and experiences that teacher’s plan for the children. This belief originates from the requirements for transition to the primary school, therefore the teachers emphasize the knowledge domain at the expense of the other domains of child development that entwine in learning. This reflects observations by other scholars about the increasing trend to emphasise academics at the preschool in many parts of the world (Goldstein, 2007:396; Maccoby & Lewis, 2003:1074; Moyer, 2001:161; Parker & Neuharth, 2006).

Parents’ anxiety about their children’s academic success begins at the preschool (Robinson & Diaz, 2006:51). In what reflects how teachers interpret parents’ anxiety, Belinda remarks “parents expect that when their children come to school…they expect them to know how to write; and to read” [BE01:131-134]. Stella adds her observation about such demands, that “somebody brings a child to baby class after a week or at the end of the day he wants to see that, that the child already has written something, something on a book” [ST02:226-230]. Belinda’s and Stella’s comments express their belief that parents push them to teach academic skills too soon. These sentiments reflect what Geist and Baum (2005:32) calls the ‘yeah-but’ resistance, where early childhood teachers understand what is developmentally necessary for children’s learning, but have their own reservations in implementing it. It is also consistent with Wien’s (in Goldstein 2007b:380), findings that only two out of eight participants were able to balance the demands of a standards curriculum with meeting children’s developmental needs. In contrast, teachers in Cassidy and Lawrence’s study (2000) placed little emphasis on the
cognitive, language and physical domains, but more on the social and emotional dimensions.

The definition of a ‘preschool teacher’ connotes the image of a teacher whose role it is to teach, but the definition of teaching is problematic here. Broström (2006) introduces a dichotomous view of education and care, in what ought to be one seamless practice. In some contexts, such as in Denmark, where childcare is not synonymous with early childhood education, society places more emphasis on the care than on education. In contexts such as these, the introduction of ‘academic skills’ to children in the ‘care’ contexts might be termed inappropriate, while ‘too much care’ for children in the ‘education contexts’ is still inappropriate. In both of these approaches, there is likely to be a perception problem of what children ought to do at preschool. The dichotomous expectations result in ‘the early childhood error’ and the ‘elementary school error’. The former is the belief that adults and the environment minimally affect children’s growth’, leading to the negligence of the educative role; the former results in a pushdown of upper grade content and methodology to the preschool (Warner & Sower, 2005:25).

This dichotomy is problematic in the Kenyan context, where the Ministry of Education regards the preschool as both, while the parents and the teachers view it as a school context rather than a care context. Whatever the view, it is problematic because it presupposes discordant expectations. Moreover, the definition of a teacher presents another angle: who is a teacher? Does a teacher also help the child to gain the other pieces of knowledge? Perhaps the terminology ‘teacher’ might be more responsible for this limited role perception than if the term used were ‘care-teacher’, as a way of broadening the perception of the preschool teachers, whose roles require them to care for children first, before teaching them. Such a double identity would help to broaden the approach to teaching children.

When the preschool serves a variety of purposes, the teacher does not readily identify with the ‘childcare role’, but rather the ‘learning role’. The latter is prominent in the current study. This is also a shared understanding and interpretation of the school between the various stakeholders, apart from the Ministry of Education. There is need to ascertain the reasons for this obsession with ‘academic standards’, rather than the behavioural. Could it be that the ‘academic’ is more valuable than the ‘social-behavioural’ or ‘physical’? Perhaps, nowhere in the interview did this discordance
express, as in the lack of adequate exposure of children to materials, and the over-
simplification of what children go to school to do. Regardless of the pressure felt by the
teachers, their cognitive emphasis overruled other concerns. In all, the teaching strategy
that the teachers used seemed to mirror the dichotomy of either playing or preparation
for school transition.

Culbertson and Jalongo (1999) observe that although the parents talk against the practice
of workbooks, they are the first to demand workbooks for their children as soon as
possible. Barnes and Lehr (2005:111) identify teacher-obligations with regards to
parents: ‘teachers have four major roles in relation to parents: to facilitate a child’s
growth through parent contact, to support and empower parents in their parenting role; to
provide resources; and to facilitate the transition of parents and children to their next
environment’. However, they note “parents have been viewed by some teachers as
irrelevant to the decision-making process of education and at worst as adversaries”
(Barnes & Lehr, 2005:111). In this study, the teachers saw parents as interfering rather
than facilitating learning. In one reference, one teacher suggested that some parents
could be doing the homework for the children, whereas Enid suggested that parents
should be tolerant of children’s individual differences:

[EN: A kid to pass that is what they want…either they want that kid to go to class one but they
don’t want to understand the procedure you are supposed to take while you are giving that
child may be when you are introducing something you want that child to understand][EN04:205-207-01]

Regardless of parents’ demands for written tasks and for children to perform well in the
preschool, Enid believed that there was a need to prepare the children to fit into the
primary system. This is a belief that suggests her DAP practices reflect this role, in the
context. Indeed, the roles that preschools serve generate the diversity of purpose, and
therefore focus, as Broström (2006) argued. While some parents take their children to
school to learn, others take them for childcare reasons.

Although the teachers in this study perceived parents and the primary school qualifying
interview as sources of pressure, Belinda managed to strike what reflected as a balance in
her teaching. She created time to teach skills, and for children to engage with free play.
However, she did not engage the children in verbal interaction, even as they engaged
with free play, which suggests a belief on her part not to interrupt on such occasions.
In my view, parents are genuinely concerned with their children’s progress and ability to get admitted to the only good primary school on the compound, and if not, to the only other private school, immediately outside the compound. The context of the study as an isolated location has two implications: if a child fails to gain admission to either of these two schools, then another problem arises, where does a parent take him or her, when the nearest town is 40km away? This is a limited resource issue. Secondly, the location of the school predisposes teachers to open rather than closed relationships.

For example, it is common in this community to display the list of children successfully admitted, on a notice board next to a shop within the University compound. In a way, this list violates the privacy of the schools, as well as displaying their progress at the same time. Although the list might introduce social pressure in the way teachers prepare children for this interview (because each school wishes to present a positive social image), this also is an opportunity for parents to compare the preschools’ performances, with the list also indicating the name of child admitted and the preschool they attended. In addition, it generates an impression among both parents and teachers that ‘my child can read’ or that ‘I send all children for enrolment’.

Therefore, it is not surprising that all the teachers in this study thought it necessary to prepare children to ‘fit’ (with demands of primary school). Although good performance at the standard one interview is desirable for both parents and the schools, it does not reflect the true quality of learning or child development. The interview should test academic skills that children have learnt through rote learning and memorization. Research suggests that teacher-directed approaches on the long term effects on children’s emotional wellbeing are negative (Burts et al., in Parker & Neuharth-Pritchett, 2006; Charlesworth et al., 1993), while the academic skills benefits acquired through rote learning are short-term (Marcon, in Parker & Neuharth-Pritchett, 2006). The issues of whether or not the children actually fit, or whether the teachers’ concerns is not merely for them to retain their employment, since the parents have the power to hire and sack them, would require another study.
6.3 PREPARATION FOR THE INTERVIEW

“Competitive school environment... ‘They have to read and to know how to write...’ Most of the things we do are to run; we are trying to chase the...what can I say, time or what?’” [Enid].

“...since so many schools appear to be struggling or failing, maybe it behoves us to reflect back to different times when Kindergarten seemed more relaxed and was fun” (Miller, 2005:260).

For Enid and Lenora, who were teaching at the last year of preschool, the pressure to prepare children to fit in standard one was their major concern, which was not the case among their baby class counterparts, except for Belinda who mentioned perceived pressure. They were all concerned to prepare children to fit with the demands and conditions of the interview. Enid believed that she ought to use pedagogic approaches that reflect the experiences of the primary school environment, and which encourages children to learn how to write from the chalkboard. Their sentiments follow:

[BE ...when it comes to the child to go to STD 1... fitting to go there to standard; they [sic- primary teacher interviewers] expect them to know how to read; to be a fluent reader][BE01:297-303]

[EN...when going for an interview that is what they will do...the way I know the situation...they have to read and have to know how to write from the blackboard...and you see that is because of the environment...there situation the way it is there][EN04:167; 169; 171-01]

[LE: That is why we teach them... To an extent that when they are going for the interview... They have known almost, we even...we can even teach them to an extent of knowing the provinces and all those that do not even come in lower classes][LE01A:686-690]

Both top class teachers appeared to believe that their teaching content ought to reflect that tested by the interview, as they both pitched the difficulty level of tasks to this expectation. Enid and Lenora commented about the difficulty level of the standard one interview in the following ways:

[EN: Whatever they do there [interview], it is tough, they do not bring things like one plus one or two plus two...because of that, we are a bit ahead. Most of the things we do are to run; we are trying to chase the...what can I say, time or what?” By the time [of the interview], they are supposed to know how to read and write, do subtraction, addition, all those things, and these are the things which are normally brought in the interview][EN01:332-336]
Authors have suggested that the pedagogic approaches used in preschool in Kenya follow direct methods, which are not child-centred. The curriculum focuses on content beyond the children’s ability level and development (Prochner & Kabiru, 2008). Biersteker et al., (2008:243), and preschools in Kenya face pressure for skills-based learning. Geist and Baum, (2005:29) note that kindergarten teachers display resistance to use DAP and they should use a similar approach as the next grade teachers to avoid confusing children. Although Enid was sympathetic to the children and the ‘overworking’ circumstance at the preschool, she suggested that her approach to focus on academic skills might be helpful for the children to cope with the demands of the primary school. In fact, Enid linked the successful transition that their children experienced at the primary school to this ‘overwork’ at the preschool. She summarized this view in the following comments:

EN: mmh, to me it is a bit overworking, but it is helpful...when they are in primary, they are still doing well, they are not behind... It has been of good use to them: mmh, you know the way the situation is.... the syllabus of the primary school, we cannot say it is easy. It is hard for the children: even in nursery schools, they have to prepare them...when they go to class one they will find these things, math for homework, they will be given English, Kiswahili, sciences, some do C.R.E in class one, I don’t know. All those things: So when they are here, we try to prepare them. [EN01:355-365]

However, as a primary school transition requirement in some settings (Mwaura et al., 2008:128), the standard one interview reflects on issues of quality and limited resources in parts of Kenya. Some parents perceive certain schools as better performers than others, and therefore most schools are under pressure to use the interview to select high performing children.
Lenora linked parents’ interests in a school to the school’s performance in the standard one interview. She believed that parents enrol their children in preschools that perform well in the standard one interview. Moreover, she believed that a school’s good performance (in the standard one entry interview) determined parents’ satisfaction and their school’s image:

[LE: these parents…if the child doesn’t make [in the interview]…will lay the blame on the teacher…they might move the children to another school…just guessing that the teacher is the one with the weakness…][LE01:18-124-02]

Lenora believed that parents value the academic skills for their children upon which the interview and the well-performing schools focus, expressing her concern about the parents’ negative reaction if children perform poorly in the promotion interview. Therefore, apart from avoiding blame, she feared that her employment depended on children’s performance. Moreover, Lenora believed that the children’s promotion to standard one reflected on a teacher’s teaching effectiveness, expressing her concern on her self-image too:

[LE: Yah, …because…if the child fails, the parents would lay the blame on the teacher. Yah, even the management will look at the teacher and say you have done nothing, so that pressure will make me even to overwork them… yah, because I will be harassed [when children fail], and I will not have peace, I might even lose my job, yah][LE02:671-679]

Lenora linked the performance in the interview to two concerns: her continued employment, because parents and management value such success; and her self-esteem as a teacher. McMullen (1999) identified some of the teacher characteristics that influence them to use DAP; as environmental stressors and personal characteristics, including self-efficacy, locus of control and trait anxiety, as well as educational and professional experience. Lenora and Enid’s locus of control was the interview and its consequences as a determinant of their approach to plan content higher than the children’s ability. ‘Trait anxiety’, defined as the tendency to perceive life events as threatening, relates to children’s performance in the interview, and was a source of stress to these teachers (Cattell, in McMullen, 1999). Although the standard one interview is not about a national curriculum in Kenya, but a practice common in urban and well-performing schools, the findings reflect Kowalski et al.’s (2005:38) observation that teachers focus their teaching on areas tested by the national curriculum. Demands for
‘standard testing’ inhibit early childhood teachers from pursuing DAP (Goldstein, 2007:378; Geist & Baum, 2005:29).

The teachers’ trait anxiety not to use DAP is exacerbated by the lack of specific standards for the transition interview. Biersteker et al. (2008:228) note that preschool is not a transition requirement in Kenya. Although the guideline for preschool standards in Kenya (Republic of Kenya, 2006a) is explicit about the knowledge requirements, besides an elaborate guide by NACECE (2000) guideline for preschool education, the schools admitting the children do not share these values advanced by the preschool guidelines. This lack of a shared understanding of the preschool guidelines has led to an arbitrary approach the admitting schools’ use to select the content tested by the interview, as Lenora and Enid’s’ comments indicate:

The teachers use speculation of the presumed areas tested by the interview to plan their teaching, introducing a disjuncture between preschool pedagogy and content. Two issues are significant here. First, if the teachers speculate, then their self-efficacy about their ability to influence children’s learning outcomes is jeopardized (McMullen, 1999), second, the teachers’ speculative approaches to the interview, and a focus to teach academic skills undermines their approach to embrace appropriate practices.

Closely linked to the interview requirements are two concerns that the teachers expressed. These were different transition curriculum mentioned by the Montessori teachers and different transition requirements. Following is a discussion of the how different transition curricula or different transition requirements influence teachers’ beliefs and their use of DAP.

6.4 DIFFERENT TRANSITION CURRICULA/ REQUIREMENTS

“If I go on sitting with my materials... I will not have time to teach this child to know numbers 1-20, how to calculate mathematics, how to read” (Stella)

Jalongo et al. caution:

… it is imperative that the transition from home to school should not be so drastic as to cause psychological or emotional stress by imposing rigid schedules, long periods of
sedentary activity, confined spaces, unsafe equipment, or intense academic pressures on young children (2004:144).

The concept of transition involves preparing children to transition successfully to next class or to the primary school. Petriwskyj, Thorpe, and Tayler, (2005), observe that various levels of transition to school or between grades intricately link to teacher and school practices. Petriwskyj et al. (2005:59) identify three needs that make transition successful. These are communication linkages, coherence of experience, and system coherence. Communication linkages relate to the information exchanged between the home and the school or between the preschool and the receiving primary school. Coherence of experience ought to reflect continuity between the different school environments through which children transition and finally, system coherence is concerned with continuity in structure, process, and quality between the systems.

In addition, the level of ‘preparedness’ (Petriwskyj et al., 2005:59) for children to transition between various levels of the preschool curriculum appeared to reflect teacher concerns. For example, Enid and Stella, who were the Montessori teachers in the study, were concerned about preparing children to transition to a different curriculum. Lenora linked transition requirements to changing times that now requires her to teach beyond the preschool curriculum. Stella and Enid suggested that the requirement to prepare children to transition to a different curriculum inhibited them from applying the Montessori approach, which requires the use of different materials. Stella articulated this concern thus:

[ST: But you see here in our environments, we only have Montessori in nursery schools, going in a different curriculum. We have to be careful, we know we have to give them also our Montessori as well as giving them what they are going to do, because if we I want to be a real Montessori... at the end of the day, maybe I will consume a lot of time, in activity work, than in doing the writing][ST01:195-197

[ST: because with Montessori, if we say now we are going to do the real Montessori, maybe all the time will be consumed by, these materials because they are so many. You will not have time to teach this child to know numbers 1-20, how to calculate mathematics, how to read...][ST01: 199]

Enid and Lenora agreed with Stella’s concern about different transition requirements:
From Enid’s and Stella’s comments, the requirements of the primary school did not accommodate their full use of the Montessori approach to teaching. In particular, Stella cautioned that the Montessori system was not appropriate for preparing children to fit into a regular primary school, because of its emphasis on materials at the expense of content-based, teacher-directed learning, requiring a push for children to write as a preparatory process to entry to the primary school. In Stella’s view, expressed earlier, when the curricular approach of the preschool differs from that of the primary school, transition to primary school becomes problematic.

For Lenora, her curriculum emanated from the primary schools or her work context, and so required higher levels of performance. Regardless, she was sceptical that, despite the wide content coverage, there was a lack of continuity between what they taught at the preschool and what the children did at standard one. In her view, their efforts were wasted because the standard one teacher started over again, which was boring to the children:

Pritchett (2006), that teachers felt kindergarten to be more like first grade used to be. However, unlike some teachers in Parker and Neuharth-Pritchett’s (2006) study, who felt that their liaison with their grade one counterparts set the expectations right, thereby reducing pressure related to transition requirements, teachers in this study did not think that such communication was possible, albeit they felt it desirable. Neuman (2005:191) notes that pedagogical continuity ensures continuity between preschools and primary...
schools, when teachers harmonize their philosophies and expectations for children. Stella’s comments reinforce the need for such continuity. She noted:

[ST: Eeh, I could be suggesting that there could be a dialogue between this [Tumaini] and [Naet primary school] especially with the lower teachers...yah, lower teachers ee. They should be considering those ee, areas whereby if a child has difficulties they should consult the teacher, so that the teacher can present fully how this child was, what was the problem, because there are problems which can make a child be a failure and maybe she is not a failure...][ST03:87-89-2]

Research suggests that curriculum decisions that originate from parents’ needs, national curriculum and policies at the local level, limit kindergarten teachers’ autonomy in curriculum implementation (Kim et al., 2005:55; Jambunathan & Caulfield, 2006:256; Wong, 2003:50), as it also influences what areas kindergarten teachers focus on (Kowalski et al., 2005:38; Maxwell et al., 2001:443; Miller & Smith 2004:122). Transition requirements determine teacher focus (David et al., in Miller & Smith, 2004:123,126; Maxwell, 2001:443; Parker & Neuharth-Pritchett, 2006:71; Stipek, 2004:562), and differences in values between DAP approaches and social realities are in conflict with each other, in cases where didactic instruction is preferred (Jambunathan & Caulfield, 2006:256; McMullen et al., 2005:453-4).

For Stella and Enid, conflicts between reality and policy, or lack of it, entrench in them a belief that children need exposure to writing and task completion, to fit into the non-Montessori primary schools. They believe that a DAP pedagogy at the preschool should prepare children to fit into the primary school. Lenora’s concern about continuity between preschool and the primary school transition requirements reflect a conclusion by Timperley et al. (2003:32), that there is a need for school and kindergarten teachers to collaborate to enhance continuity for children’s transition between the two environments. Such collaboration ensures that teachers equip children only with skills necessary for a smooth transition.

Besides the perceived difference in transition requirements, Stella and Enid suggested that parents who enrol their children in Montessori preschools do not understand the application of Montessori principles. In their view, when parents lack such knowledge, they make demands contrary to the approach; such as demands for written work, even among the three-year-olds who have not yet reached the writing developmental level.
Enid concurred with Stella, that Montessori curriculum was slow in the context of the requirements to prepare children for mainstream schooling:

[Wong (2003:50) concludes from a study of teachers using the ‘project approach’ that teachers feel frustrated when their teaching approach is not appreciated or understood in the context of implementation, or when they cannot implement their curriculum as they understand it. The sentiments of Enid and Stella reflect a frustration that parents might not understand the Montessori teaching approach. The teachers’ frustrations and sentiments reflect on what they perceive as a competitive school environment, which required academic skills teaching involving many workbooks and academic skills teaching at the expense of using the Montessori materials. In the next section, a discussion of their concerns in relation to this theme follows.

6.5 COMPETITIVE SCHOOL ENVIRONMENT

[Wong (2003:50) concludes from a study of teachers using the ‘project approach’ that teachers feel frustrated when their teaching approach is not appreciated or understood in the context of implementation, or when they cannot implement their curriculum as they understand it. The sentiments of Enid and Stella reflect a frustration that parents might not understand the Montessori teaching approach. The teachers’ frustrations and sentiments reflect on what they perceive as a competitive school environment, which required academic skills teaching involving many workbooks and academic skills teaching at the expense of using the Montessori materials. In the next section, a discussion of their concerns in relation to this theme follows.

6.5 COMPETITIVE SCHOOL ENVIRONMENT

[LE: If the children do not make to standard one, we shall loose children. Because the parents see the school, that does well [in the interview] or the school that takes more children to standard one…][LE01A:700-708; LE01B:320-334]

[ST: ‘Montessori, we are even straining a lot with mathematics especially, reading is okay…the reading is there, in a Montessori a child must read [ST03:800-812-01] because there they just insist on somebody to pass… [in skills-based subject][EN04:205-207-01]

[EN: Okay, so according to me the environment here…is totally different from the one in Tumaini] because there they just insist on somebody to pass… [in skills-based subject][EN04:205-207-01]

[BE…yea sometimes it’s too early [for children to write] but…it is the way in preschools … because competition is very high, so… so we have to introduce to them so that your children can fit… [To the school demands of the environment][BE01:204-220]
Belinda’s comments suggest that the focus on skills-based teaching reflects what goes on in other preschools within the environment, when she reiterates that ‘it is the way in preschools’. It also suggests that she holds herself responsible for preparing children to ‘fit’ with the requirements of school transition. Belinda’s comments reflect Lenora’s sentiment that their environment is competitive, and yet a school’s enrolment\(^{41}\) reflects on the general perception held by parents, such that the higher a school’s enrolment, the better the rating of the school in the parents’ view. Both Lenora and Belinda embrace a ‘personal self efficacy’ principle (Ashton \textit{et al.}; Gins \textit{et al.}, both in McMullen, 1999), that predisposes them to work towards a positive outcome that they attribute to their efforts, as when “your children can fit” according to Belinda’s comments. It is not surprising that both DICECE teachers perceived a ‘competitive school environment’, which Lenora attributed to the practices in private schools. She suggested that teachers in public schools\(^{42}\) must prepare their children to compete equally with those from private schools:

\[\text{LE: These days we find that the competition is, too high,… we are forced to go by time, because we find these private schools, they want to teach beyond}][\text{LE01A:646-656; 658}]

\[\text{LE: and those schools in town [private schools] they [colleagues] get papers from those schools and they find some work that we have never even come across one time. They bring them and that teacher will assist the rest, saying there is some work here let us teach the children…}][\text{LE01B:320-334}]

\[\text{ST: ‘…us here, we are teaching a lot of things’}][\text{ST03:800-808-01; 812-01}]

Although Stella and Enid linked their beliefs to a competitive environment, they focused more on the disjuncture between the Montessori curriculum and the primary school transition. Stella contrasted her previous work experience in two other school settings\(^{43}\) to her experience at Tumaini:

\[\text{ST: Because let me say for example, me when I started my T.P (teaching practice) in [sic another school with primary attached], eeh, we were teaching children, em and the children were going to the same school, where the nursery was whereby I can say eeh is very much different with here in Tumaini. Because when us here at [Tumaini] we are teaching children a lot of things even apart from that of Montessori we are even straining a lot with mathematics especially, reading is okay… the reading is there, in a Montessori a child must read}][\text{ST03:800-808-01; 812-01}]

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\(^{41}\) The Montessori preschools usually hold a prestigious position in Kenya, charging higher fees than DICECE preschools (see chapter three for the difference in fees charged by the two schools). Besides, in the study context, the Montessori preschool has a higher pupil enrolment than the DICECE preschool.

\(^{42}\) Their DICECE is more or less a public preschool because it receives direct financial support from the University by employment of teachers although parents subsidize through fees payment.

\(^{43}\) Stella had been to three schools that are located in relatively rural settings.
From her comments, Stella believed that the current University environment, regardless of an expectation that parents be more enlightened about child development, would pressurize them to engage children in written tasks.

[ST: But, I found that for example when I was in [another preschool attached to a Primary school] [em we would only teach a child to know numbers 1-20 do an exam of, do exams of addition and subtraction ...eh and Kiswahili was not so much pressurized in learning, like here in [Tumaini]... Eeh, because you see here in [Tumaini] you have to teach numbers even up to hundred (100) ...Take away all sums vertically and horizontally, reading both Kiswahili and English, fluently, Like, things like sentence...us we never teach sentences in [former school], even in [X] [another school]. ST: But we taught the children to read, yes, but simple words like, book, tree][ST03:814-826-01]

Lenora corroborated Stella’s concern that currently they were responding to the stiff competition by teaching beyond the preschool requirements. She said:

[LE: This time [sic currently] the child has to read... Sentences even the difficult sentences that the lower primary school children cannot read... Yah (pause) so we are forced to teach them to teach them to the extent of the child reading even the difficult sentences... because we have what I told you look and read...the child has to (pause) see, we have to introduce them for example them][LE01A:732-740]

To respond to the competition Lenora suggested that she schemes were beyond the preschool curriculum, in what she called ‘own collection’. She used this term to refer to extra work that teachers accumulate from their colleagues from other schools44. By so doing, they broaden their scope of coverage, in anticipation of competing favourably. About her own collection, she said:

[LE: We scheme even to our own our own collection. Yah, to our own collection, even the work that we don’t find in our eeh (pause) this in these books in our curriculum... because of this competition that is going on][LE01A:67-674]

Scheming to ‘their own collection’ beyond their preschool curriculum is a good way to keep informed about what goes on in the surrounding environment, only if it relates to training and qualification of the teacher. However, the teachers were accessing, through their colleagues, a curriculum higher than their training. As earlier mentioned, this raises the question of how qualified the preschool teachers might be to teach a curriculum that went beyond their training level. It also introduces variability in schools on how they

44 Lenora and Enid mentioned one good performing school in town during our discussion as their point of reference to competition.
prepare their children to transition beyond nursery school, as this will depend on the preponderance of the teachers to seek information.

Lenora suggested that the high population of nursery school children competing for standard one admission to the only public primary school in this context had influenced their inclusion of ‘*their own collection*’, so that they could equip children for success. Lenora introduced another concept into the preschool curriculum, which had implications for the competency of the teachers to implement, as well as the use of children’s time. Her mention of their inclusion of the teachers’ own collection, while it allows for flexibility and perhaps a wide scope approach to the curriculum, could also diminish children’s playtime. Moreover, such ‘*alien curriculum*’ could strain both the teachers and the children, because while it may increase the scope of content coverage, it was not yet subjected to professional censorship, for its suitability to the preschool.

Lenora, Enid and Stella believed that the demands for children to learn academics in current environment were higher than the provisions for preschool education. The perceived demands to prepare children to cope with a competitive school environment are open to several possible interpretations. Firstly, since this is a University environment, where teachers expect most of the parents to be knowledgeable about school performances, this predisposes them to attribute expectations for good performance to parents, unlike if the teachers taught in a typical rural preschool. Secondly, it is possible that these ‘educated’ parents, some without knowledge of DAP, might expect to see their children writing and reading. It is also possible that teachers will want to prove that children attending their schools are capable of academic tasks, which the Kenyan society can readily assess, such as through the interview or as children appear articulate in spoken language, at the expense of using play that might not be readily assessed. In my view, this perceived pressure to compete favourably or to gain favour from parents is the reason the teachers introduced children, including 4-year-olds, to early writing. Lenora’s comment illustrates this view:

> [LE: Yah we scheme them as teachers’ own collection…the work that is in our curriculum books, the work is too shallow…][LE01B:282-300]

Although Lenora and Belinda were concerned about the pressure and competition from private schools, as a factor influencing their curriculum approach, Lenora’s position did not depict a consciously compelled position, but rather, the teachers’ own prerogative to
scale up the preschool curriculum. This reflects a conclusion by Mwaura et al. (2008:238), that there are some sought-after schools in Kenya. Some stakeholders have alleged that private schools drill learners to pass examinations at the expense of actual teaching, where children ought to learn. This is a contentious issue for all stakeholders at all levels of education, from preschool to secondary school. This concern has been specific to private schools, with some alleging that private school children do not make the grade, when admitted into public secondary school, because they lack the luxury of individual attention that they enjoy in private primary schools.

However, the ‘sought after’ school phenomenon is understood from the overall framework for education provision in Kenya. Parents want to enrol their children in primary schools that are not overcrowded, and that ensure optimal levels for learning for their children. Such schools also fall within the category of the public-funded, but appear to run autonomously, independently of government policies. For example, while the government policy is explicit that no interviews shall be used to admit children to standard one (Republic of Kenya, 2006a), these ‘semi autonomous’ public primary schools, without an explicit source of their autonomy, still use interviews to admit pupils. Mwaura et al.’s (2008) notion of the sought-after schools also links to the overcrowding observed in some public schools. Currently the teacher-pupil ratio is between 1:47 and 1:40, while the textbook to pupil ratio is 1:3 (Republic of Kenya, 2007:99-100).

6.6 PEER INFLUENCE TO DIVERSIFY APPROACH

Each of the three teachers who mentioned influence by colleagues also emphasized certain factors. For Enid, it depicted pressure when fellow teachers use a different approach to teach concepts, resulting in a non-Montessori approach, and differential content coverage, which might be of concern to parents. It appeared to her, that when teachers in the same school use divergent approaches, it undermined both the Montessori
Lenora and Stella suggested that their exposure to interactions with fellow teachers who had previous variable approaches and content coverage helped them adopt the methods that in their view had been beneficial to them. Teacher nuances resonated with those of one of the teachers in Goldstein’s (2007b) study who was surprised to find early childhood setting focusing on materials she had developed were rendered useless by the approach used in the setting in which she worked.

Kostelnik et al. (2004:325) highlight this divergent and rather confusing approach to teaching within the same school as an issue that requires redressing. They summarize their view of the conflict in what might reflect a contrasting approach for new teachers entering the profession who find conflicts on methods that are familiar to them as to how to teach emerging literacy. Authors suggest that school and social forces influence teachers’ views of readiness (Graue, in Lin & Gorell, 2003:226; Schoonmaker & Ryan, in Cassidy & Lawrence, 2000:194).

6.7 PERCEIVED LACK OF TIME

This theme was explicit in our discussion about the silence of materials and why the teachers did not engage children with the materials nor create opportunities for them for free play. The context of non-use of materials should guide the interpretation of the following sentiments.

[ST: ‘Yea, but you see, time does not allow you to follow each and everything...so you have to use the material that you see they are very quick, not to waste a lot of time] [ST01:231-245]

[EN: so you discover that most of the materials we use in Montessori because they are slow you go on a slow pace, you cannot just go that fast... we have to put them aside.] [EN02:424; 456; 458; EN04:225-1]
One of the factors, which Stella and Enid believed impinged on their implementation of a Montessori curriculum, was lack of time. For Lenora who is DICECE trained, she noted that due to a wide content coverage, she created more time for children to do oral work in the afternoons. Consequently, these teachers were under pressure to cover certain content areas, due also to what they called “the environment”. Interestingly, in what contradicts her general view, Stella suggested that children were wasting time if they used the Montessori materials. Stella could only be selective about the material to use. According to her, such materials were those that she could use quickly:

\[
\text{ST… No we don’t [use materials], let me be sincere anyway]}^{\text{ST01:203-209}}
\]

\[
\text{ST: Okay, there is this problem also, our schools in these our environments is half day, not a full day. If it were a full day, we could do everything, both...we anticipate a lot of problems because as far as we may deal with these materials, maybe one material has a lot of stages, one two three, four, even to six. So if you deal with the same materials maybe one to six, maybe the whole term will finished... so you have to limit]}^{\text{ST01:231-245}}
\]

Stella believed that the Montessori approach required more time than was currently available. In her view, if the Montessori were a full day preschool, the problem of rushing through the day would be solved. However, her perception was that whole-day kindergarten would facilitate their application of the Montessori curriculum but negatively affect children’s social and emotional functioning. Studies of effects of centre-based care on children show that long hours of centre-based care improve their cognitive-linguistic functioning, but children expressed more negative social-emotional behaviours after long hours in centre-based care (NICHD, in Belsky, 2006:106). Lenora summarized her current concerns about the changing requirements in kindergarten:

\[
\text{[LE: A long time ago,... children were...we were not allowed to teach the children the words... We are... we are forced to go by time... we find these private schools they want to teach beyond’]}^{\text{LE01A:646-259}}
\]

Perceived lack of time as a factor influencing teachers’ beliefs adds to the findings by Wang et al. (2008:244) that their Chinese sample felt that their practices did not reflect their beliefs due to time limitations.
6.8 CONCLUSION: FACTORS INFLUENCING TEACHERS’ BELIEFS ABOUT DAEP

Several factors influence teachers’ beliefs use of developmentally appropriate practice. Each of these embraced the concerns held by the teachers about transition, perceived lack of time, pushed-down curriculum, and fear of reduced school enrolment. Most of the factors, as discussed in this section, however, are located beyond the teacher’s sphere of influence. In the following chapter, I relate the teachers’ concerns to the larger social system through a bio-ecological systems theoretical framework.

For example, among the Montessori teachers, there is a need to prepare children to transition to a non-Montessori primary school, contributing to their focus on a subject-based, teacher-directed approach. Since each of the four teachers takes children from baby through to the senior class before they present them for the interview, they wish for an early start for their group of children, as their performance reflects on teacher competence. Expressing her amazement at the consequences if the children failed the interview, Stella said:

[ST: Aii, Wa’ wa’ wa’, wa’ wa, I hope it won’t happen, Okay, it can happen but it has not happened… that will be chaos now because I don’t think now unless there is a problem. I think if the children fail, that means sacking][ST03:334; 338-02; 356; 358-02]

Stella suggested that her colleagues from other schools had influenced the way she taught. This indicates that educational practices are porous, and being affected by external influences. In this case, the external influences on teaching practices of other schools and teachers have infiltrated to this preschool through colleague interactions. Teachers’ beliefs are entrenched in their experience (Schoonmaker & Ryan; Katz, both in Cassidy & Lawrence, 2000:193-4; Lightfoot & Valsiner, in Cuskelly & Detering, 2003:45). The teachers’ interactions among each other have contributed to their varying the curriculum. Stella’s comments capture the influence from colleagues in her sentiments:
From the foregoing discussion, teachers in the study feel compelled to respond to a number of pressure sources, which include: preparing children to fit in a non-Montessori curriculum; responding to parents concerns; community pressure from competitive school environment; and perceived lack of time, all of which have affected their use of DAP approaches. This study echoes previous findings that teachers respond to parents’ pressure by increasing children’s homework, giving more academic-oriented work and teaching directly, even when they disapprove of such measures (Stipek & Byler, 1997:317), and that children’s literacy experiences were affected by perceived external pressure (Miller & Smith, 2004). In addition, what transpires at the preschool is the result of many factors, including:

Knowledge of the principles of child development, parents’ goals, expectations, aspirations, their understanding and preferences with respect to appropriate experiences for their children…what teachers are willing or able to do…teachers may be willing to implement some practices, but for a variety of reasons, may be unable it do so and vice versa (Katz, 1995:100).

These sources of influence on teachers’ beliefs, suggested by previous scholars, agree with what the teachers discussed in the current study. From their sentiments, they were responding to, as well as creating, circumstances that favoured their continued employment. This is consistent with the findings of Wang et al. (2008:144), that the Chinese sample attributed the disparity between beliefs and practices to the pressure to align their beliefs to the directors’ beliefs, their experience and government regulations. However, Wang et al. (2008:243) report that American teachers in their study were likely to consider children’s needs when they plan for teaching, while Chinese teachers consider practical limitations, such as limitation of resources and government regulation. Generally, the focus on skills-based teaching contradicts the findings by Kowalski et al. (2001:9), that teachers prioritized language and socio-emotional skills. Kowalski et al. (2005:38) conclude that teachers tend to focus on ‘teaching to the test’, mainly on those areas that common assessment tools test. But, Trawick-Smith (2003:199; 348) cautions that schooling experiences vary remarkably from one society to another, depending on
the expectations of the wider society, and the ‘cultural’ wiring for activity among children. In the next chapter, I consider the findings of the study within a framework of bio-ecological systems theory.

A brief sojourn after voyage six

As we explored the sixth leg of this voyage,
I showed you how I got answers to the questions on the factors influencing teachers’ beliefs...

We heard teachers mention;
Responding to pressure from parents...
Preparation for the interviews
Different transition curriculum
Competitive school environment
Peer influence and
Perceived lack of time...

In the next part of the voyage, I take you through a synthesis of the whole journey...
VOYAGE SEVEN
PUTTING THE PUZZLE PIECES OF THE JOURNEY TOGETHER

Coming up in voyage seven

As we begin the journey into voyage seven, we shall link the data into the DAP framework ...
As we scale the heights of academia, we shall link teachers’ beliefs and children’s educational experiences to their social-cultural context...
And as we come to the end of this journey, I propose a seesaw model to help interpret preschool teachers’ beliefs and children’s educational experiences.
Join me now in this theoretical journey...
7.1 INTRODUCTION

Developmental theories and research are shaped by value systems, philosophical mindsets, and historical circumstances within specific cultures’ but are necessary to interpret [and] assess relevance of current practices in Sub-Saharan Africa (Pence & Marfo, 2008:83).

This chapter is an attempt to discuss and overlay the research findings to the theoretical framework on preschool teachers’ beliefs of developmentally appropriate educational practices. To achieve this aim, I will first summarize the findings to the DAP framework, highlighting examples from across the cases, before I link the emerging themes to the various levels of the bioecological systems theory. Even more, an overarching intellectual concern is to provide, within the contextual dynamics of preschool education in the Kenya, a meta-theoretical link between the bioecological theory and the dynamics of ECD in the Kenyan context. In the second part of the chapter, I introduce the seesaw model, which might help various societies to understand and define what is developmentally appropriate for their children. Therefore, the DAP principles framework (Bredekamp & Copple, 1997; Kostelnik, et al., 2004; Rushton & Larkin, 2001; NAEYC, 1997; 2009), and the bioecological systems theory will guide the discussion (Bronfenbrenner, 1972; 1979; 2005; Bronfenbrenner & Evans, 2000; Swick & Williams, 2006).

7.2 THE DAP FRAMEWORK

Although the twelve principles of DAP will be highlighted, only those that feature in the study will guide this discussion. Consequently, I discuss these twelve principles under three broad categories: consideration of children’s unique way of learning; consideration of the type of the learning environment; and consideration of home or school relationships. Although the three levels and categories of DAP might appear distinct, it is essential to note that they interrelate to explain best practices for optimum child development.

As an illustration of how the DAP levels interrelate, in Belinda’s class there was a child called Chepchirchir, who seemed to display variable ways of relating to her learning environment. This girl had her way, and was less emotionally mature, as she was not yet

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45 This is a pseudonym for this girl. See vignette four in chapter five for more details.
socialized to routine and turn-taking. Although Chepchirchir was yet to develop social competence to cope with her learning tasks, Belinda accommodated her by getting her occupied, even if in a different activity, so that she did not interrupt the flow of the activity with which the children were currently engaged. Even in instances that Chepchirchir interrupted learning, Belinda gently held her hand and diverted her interest to another activity. Belinda understood that this child was an orphan, having got the information from the guardian, and that her need for an emotionally secure learning environment was a priority. In this example, all levels A, B, and C consolidate how Belinda might have embraced a DAP approach to interact with Chepchirchir. Kostelnik et al. (2004: 16-16) and NAEYC (1997:4-5; 2009:9-10) summarize the three levels under which the twelve principles fall, as illustrated by figure 44 (below).

**Figure 44:** Three levels of summarised DAP principles
7.2.1 Connecting teachers’ beliefs to DAP principles

To emphasize the uniqueness of childhood, Kostelnik et al. (2004:17) maintain, “we as educators must recognise the unique way in which children are children, not miniature adults”. This statement summarizes the generally agreed upon position that childhood is a period when children display certain dispositions related to their ages, such as the preponderance to curiosity about the surrounding environment, and the urge to use their bodies to learn (Mallaguzi, 1998; Seefeldt & Wasik, 2006; Sroufe et al., 1996). This principle proposes an interface between the developmental domains of an individual (cognitive, social, emotional and physical), and the sequential order of development, in incremental parts. In addition, it also proposes that earlier experiences have snowballing effects on later development, and that a child’s current abilities can be the basis upon which to predict their overall rate of development, although variable rates might occur from one domain to another. For example, a child’s physical precocity might translate to social development.

The assumption that children are active learners who require tangible experiences to engage their senses, to develop within the limits of their biological and environmental factors through play-based opportunities, are all factors to consider in planning for a DAP curriculum (Crowther & Wellhousen, 2004:187; Gallagher, 2005:18; Kostelnik et al., 2004:46; 49; Seefeldt & Wasik, 2006:89; Smidt, 2006:54). Consequently, the DAP principles are assumed to form the basis of the theories of child development, upon which early childhood teacher training courses are based, because the principles have a theoretical and conceptual backing (Bredekamp & Copple, 1997; Kontos and Dunn, 1993:54-5; Kostelnik et al., 2004; Stipek, 1993:32; NAEYC, 1997; NAEYC, 2009). Following is an illustration of how teachers’ emerging beliefs extrapolate to these principles.

7.2.2 Principle 1: Domains of child development are entwined

The first principle states: “All the domains of development and learning-physical, social and emotional, and cognitive—are important, and they are closely interrelated. Children’s development and learning in one domain influence and are influenced by what takes place in other domains” (NAEYC, 1997: 2009:11)
The interrelationship in the ‘domains of development’ principle suggests that various domains of development such as cognitive, social, emotional and physical development exist in harmony with each other (Bredekamp & Copple, 1997; Rushton & Larkin, 2001:28; Kostelnik et al., 2004:41; NAEYC, 1997; Sroufe et al., 1996). Belinda, Lenora and Stella corroborated the ‘whole child philosophy’ view as follows:

**[BE]: These pictures make the class look attractive, the children like things that are bright, bright... And they learn names of the pictures ... there you will give the children moulding [play dough] and then they discover by themselves. You will find some of them making letters... some of them making many things they see at home; it co-ordinates (pause)... the hands and an indirect preparation for writing ... it makes the muscles stronger...** [BE01: 370-374; 457; 459; 463; 465]

**[LE]: You know sometimes a child comes from home, when the child doesn’t have moods to learn; during the indoor free choice activities... this child will interact with others... When the hand is put in paint and the child prints on a paper, the child will be very happy. Even by the end of the day when they reach home, they tell their parents I have really done some good work you will come and see my work]** [LE01B: 82; 84; 86; 88; 632-634]

**[ST]: Eeh, whereby I find eeh using this material is quite, a good method because as a child sees, feels, and does whatever she/her is doing with the material]** [ST03:306-01]

Both Lenora and Belinda linked children’s learning to their emotional states. For Belinda, the emotional effects of colour illustrate her class full of animated months of the year and days of the week, because “children like bright things”. She also linked the children’s play with playdough to their preparation for writing, because playing with the dough strengthens the muscles. Lenora linked the emotional state of the child (“doesn’t have moods”) to their readiness to participate in the learning activities. In her view, such indoor free play as part of the schedules in the morning would help the child to ease into learning, as it also provides the opportunity to interact with others. Notwithstanding the silencing of materials, Lenora articulated the value of free play as part of a holistic approach to develop the child. Stella appreciated the holistic approach to children’s learning through a simultaneous engagement of their senses, as the child “sees, feels, and does whatever... with the materials”. Evidently, the teachers articulated the value of this principle in children’s holistic development.

According to the principle of ‘interrelated domains’, children’s learning should incorporate many dimensions of the domains at the same time, while encouraging teachers to beware that all the senses of the child, sight, smell, taste, touch and hearing, are avenues to learning (Rushton & Larkin, 2001:28). A child’s motor development
(such as in writing), and reading, which is cognitive, might be interrelated (Graves; Adams; Weaver; all in Rushton & Larkin, 2001:28). Consequently, reading and writing are entwined as both require the child’s visual acuity (which is a physical ability), in addition to letter recognition and word recognition (as a mental processes) (Rushton & Larkin, 2001:28). Kostelnik et al. (2004:41) argue that educators should concern themselves with the whole child, in “whole child philosophy”. Miles and Stipek (2006) demonstrate that positive social skills in kindergarteners and grade one children predicted better literacy achievement, concluding that considering the whole child philosophy is beneficial to child development. NAEYC (2009:11) state that “children are thinking, moving, feeling and interacting human beings”, and that their educational activities should embrace the interrelated domains of the child’s development.

7.2.3 PRINCIPLE 2 & 6: DOMAINS OF CHILD DEVELOPMENT ARE SEQUENTIAL WITH LATER ABILITIES BEING MORE COMPLEX

The second and sixth principles closely interrelate. Therefore, the discussion juxtaposes the two. The second principle states that ‘many aspects of children’s learning and development follow well documented sequences, with later abilities, skills and knowledge building on those already acquired’” (NAEYC, 2009:11)

The sixth principle states that “development proceeds towards greater complexity, self-regulation, and symbolic or representational capacities” NAEYC (1997: 2009: 12).

All the teachers emphasized the role of predictability of the direction of learning, even within their teaching. According to them, a child’s entry behaviour determines their future learning capability. Moreover, future work builds on the present abilities of the child to complete certain tasks. For example, teacher Stella noted that if a child were quick in grasping certain concepts in one area, such a child would quickly grasp concepts in other areas. Enid, Belinda and Lenora embraced the principle of cumulative effects of children’s prior experiences, and how it explains children’s learning:

[EN: ...we take every child according to how they have been doing their work. Maybe this one was fast enough in learning sounds, so introducing letters to that child is much easier. [EN0:26; 64-68]

[BE: ‘[Yaani (that is), you just look at how the child will do his work- if he doesn’t do well, next time, you will just write for him/her a single letter; And the one who can write, you just write] [BE: 168- 170]
7.2.4 **Principle 3: Consideration for variability in children’s learning**

The third principle states: “Development and learning proceed at varying rates from child to child as well as at uneven rates across different areas of a child’s individual functioning” NAEC (1997: 6; 2009:11).

In the study, the teachers rhetorically articulated their belief about children’s uniqueness\(^{46}\), noting that it was a consideration in their plan to consider children’s variability: All the teachers acknowledged children’s individuality:

> [ST: As far as I am concerned, I know that in a class that all the children cannot be on the same ability][ST03:48-60-03]

> [EN: …when you take that course [early childhood] you have to understand a kid, that is the first thing. You know the weaknesses of the kid, you know what the kid likes, what he doesn’t like. We have some kids, they can’t listen, they are very playful…you just have to understand them first…You know what they want, what they don’t like, and what they like doing mostly when they are in class...we have those children who are fast, and we have those who are slow learner][EN0:26; 64-68]

> [BE: It depends also with the child; there are some children, who are quick learners, and there are others who are slow. So maybe you cannot introduce something as early as possible but you can get that they cannot cope up with that work, until, maybe he is older] [BE01: 249-253]

> [LE: Yah, as a preschool teacher handles such a child..., most of my time I concentrate on them [children with slow tempo] because the fast learners I just introduce and they do the work. Even within ten minutes. That fast learner will have finished every work and is bored so the other one might even take three hours before even doing the work even three sums or writing for example now the changing, they have even changed two words [LE02:346]

All the teachers emphasized children’s diversity in their personality, learning tempo, activity level and their intellectual ability. Enid included children’s interests as part of their diversity. Through differentiated tasks, Stella and Belinda tried to embrace the children’s ability level. In addition, consideration for children’s sociability expressed during choral sessions, which in some instances was a voluntary activity. This might have embraced children’s interest and ability.

However, as discussed, Lenora and Enid did not give different copying and task-completion activities to reflect children’s individual differences. On many occasions, choral reading was a rotational activity\(^{47}\). Considering similar academic skills for task completion for the five-year-olds, the compulsory rotational choral reading might not

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\(^{46}\) I discuss this theme on children’s individuality/variability in voyage five.

\(^{47}\) See section 5.3.2 in voyage five for the discussion on choral activities.
reflect sensitivity to children’s differential abilities and interests. Therefore, in all the cases, teachers believed that children had individual differences but did not seem to embrace them in planning for educational experiences. For example, despite pro-individual beliefs the teachers delivered lessons using a schedule. Even when they differentiated tasks for copying, teachers expected children to complete the tasks on schedule. Therefore, although the teachers tried to articulate differentiated tasks for the children as a measure of variability, they did not consider children’s variable tempos.

One of the significant themes that run across the literature in early childhood is that children differ from one another in their learning dispositions. Consequently, such individuality should guide teachers as they plan for their learning activities (Jalongo et al., 2004:144; Klein & Chen, 2001:17; MacNaughton & Williams, 2004:46; Seefeldt & Wasik, 2006; Sroufe et al., 1996; Warner & Sower, 2005). DAP embraces the principle that each child is unique in their learning (Bredekamp & Copple, 1997; Kostelnik, 2004:147).

However, in this study, teachers were more concerned to create similarity than diversity, suggesting that they were under pressure to bring all children on par in their school work, which negates the principle of individual differences. From the broader social context of the study, the general thinking reinforces similarity rather than difference among community members. This ‘corporate’ thinking originates from the social psyche, reinforcing ‘we’-ness’ rather than the ‘I’-ness’ in early childhood experiences. With reference to development of early childhood infrastructure, Adams and Swadener (2000) suggest that the communal psyche exists among the Kenya community, especially when it comes to pulling resources together [originating from harambee philosophy], so that everyone can have something. Although this observation link with sharing resources, this philosophy might influence the parents’ expectations. The teachers emphasized this ‘corporate thinking’ among parents.

A similar conclusion about how social values contrast with some of the DAP principles emerges from observations of oriental contexts, such as China, where the influence of Confucianism and the one child-policy influence Chinese education (Vaughan, in Pang & Richey, 2007:2). This in agreement with conclusions from other oriental studies (Jambunathan & Caulfield, 2006; Kwon, 2004; Wang et al., 2008), in which teachers focus on academic skills rather that emotional, social, and creative development. This
contrasts with experiences in the USA, which emphasize individuality, autonomy, creativity, free play and self-chosen activities (Tobin et al.; McAdoo; both cited by Pang and Richey, 2007:5).

Although there are inter-cultural differences in the emphasis on aspects of child development, such conclusions are tentative, as Maccoby and Lewis (2003) suggest. Examples from Lewis and Tobin et al. (cited in Maccoby & Lewis, 2003), and Tobin et al., cited by Smidt (2007:63) contrasts the USA’s emphasis on academic over social development, with Japanese pre-elementary schools that are likely to devote more time to free play and less to academic work.

In other respects, apart from academic aspects, the cultural diversity in the social organisation and expectations between Japanese and North American cultures is observed by Hess et al. (in Sroufe, et al., 1996:43), that conformity, rather than individual assertiveness, respect, agreeableness, emotional maturity, self-control and courtesy are highly valued in the Japanese culture. Jingbo and Elicker (2005:140) discuss how the Chinese paradigm of education focuses on transmission of knowledge and skills.

Such transmission paradigm seemed evident in the current study. Maybe as part of exercising their power and authority, the teachers approach to teaching and their class control skills were evident. From this study, as earlier noted, the children’s level of order and obedience is commendable. This might also reflect on the cultural expectation that adult [teachers] are responsible to guide behaviour, as part of their social responsibility. Besides, the children in some classes seemed to comply all the time, verbalising little to the teacher about their learning tasks, especially during written task-based assignments. Consequently, in environments where obedience is a virtue, it might be difficult to distinguish between obedience and fear. Therefore, in the context of this study, considering the ‘social nature’ of the community expectation might explain why the principle of considering commonness, rather than individual strengths, might reflect the wider social expectations.

7.2.5 PRINCIPLE 4: BIOLOGICAL AND ENVIRONMENTAL EFFECTS OF DEVELOPMENT
The fourth principle states: “Development and learning result from a dynamic and continuous interaction of biological maturation and experience” (NAEYC, 1997:8; 2009:12).
The rest of the teachers except Stella did not articulate the principle that environment affects development. Stella observed that children from ‘staff area’ and rural area (Ref ST02: 27-37) have different levels of environmental stimulation that she considers while teaching. Lenora agreed that children who are restricted to socialise in the neighbourhood at home by their parents, get unlimited opportunities to socialize with their peers. She said:

[LE: During free play, the children socialize, because as I said, the children come from different now, background. Some children at their homes, are not allowed by their parents to play with the children of their neighbours, so when they come to school, the children are very happy, another one says I come from (mentions name of the village), when I go to place X (again mentions name of the village), I do this and that][LE01:34-02]

The teachers’ comments that relate biological and environmental effects on the child’s development are anecdotal. Teachers did not articulate how biological or environmental factors interact to influence children’s development. They only mentioned the possible impact the interviews would have on the children’s performance in the interview if they did not teach them task-based assessment, which each teacher thought was an inevitable process of preparing the children for future learning at the primary school. The teachers mentioned the environment as determining their choices of what children learnt. For example, although Enid implied that she has the autonomy to re-schedule uncovered content, she felt constraint by other factors, such as the pressure to cope with other teachers in the same school to avoid disparity in content coverage, which might concern parents. She asked:

[EN: don’t you think that the parent who is in the other class will come and ask… why is it that my child is behind and yet the other child is a head of my child and yet they are in the same class] That is where you will find things difficult so you have to go together if that teacher uses “nini” may be writing over and writing over then I will have to use writing over][EN04:263]

### 7.2.6 Principle 5: Snowballing Effects of Earlier Experiences

The fifth principle states: "early experiences have profound effects, cumulative and delayed, on a child’s development and learning; and optimal periods exist for certain types of development and learning to occur" (NAEYC 1997:6; 2009:12).
Perhaps the experiences of Jean Itard with ‘the wild boy of Aveyron’ found at about age 12 abandoned in the Caune Woods in Paris, best illustrates the impact of environmental deprivation on an individual’s development. Jean Itard (1962:6; 10) writes of the state of deprivation of the wild boy:

He was destitute of memory, of judgment, of aptitude of imitation…had an insurmountable aversion to society… [With] a tendency to trot and to gallop… is then probable that if at the time [of abandonment, estimated at four-five-year-old] he already owed some ideas and some words to the beginning of education, this would all have been effaced from his memory in consequence of his isolation.

Itard succinctly underscores, through his experiences with “Victor” (name given on his rehabilitation) to the difficulty with which to try to restore certain abilities once the critical period has lapsed. Itard tried to ‘socialize’ Victor’s animal-like habits, but only to a certain level below the expected potential commensurate with age. He demonstrated the need to seize critical periods to develop certain human abilities, such as language. Montessori (1920:170) also subscribed to the window of opportunity theory when she recommended that a child’s experience with materials “provokes auto education”. The teachers commented:

[EN: and then we have those ones whom they were brought when they were over age. So their exploring time has already...(pause) gone. Because if you bring a child with four plus ama (or) five years, in to baby class, four year, four plus, you will discover that they are reluctant, don’t want to do anything, because their sensitive period had already passed. When they are three, you will discover that that is when the child wants to write and read (stress) all time all the time][EN01:396:398]

[ST: ...‘According to me the role of preschool is to prepare that child …you know about the child if the child has disabilities or not so that …as you are preparing this child to be the same with the others… I see that the preschool is so important for these kids, because they undergo that early stage whereby they have eeh their mind is absorbent mind][ST02:71]

[LE: ‘I would wish that this child that who has not who will not be able to join standard one…if it was possible the child’s parent should be called and explained that the child is not able [to perform]. Because if the child is taken to standard one…and that child will not be able to do the work in primary school… It will be a problem to that child even up to the secondary level] [LE02:731-737]

Enid echoed the observation of many scholars in early childhood, such as Katz (1995:106), that critical periods exist in the course of development, which resonates with those of Itard and Montessori, wherein, if the stimulation period of a child’s interests for learning lapses, then it will be difficult to reverse the effects later (Sroufe et al., 1996:83;229). Enid, Stella and Lenora appeared to subscribe to the ‘window of
opportunity’ principle too (Sorgen, in Rushton & Larkin, 2001:30). While Enid and Stella mentioned an ‘absorbent mind’ to the environmental stimuli, Lenora subscribed to the ‘early intervention theory’, without attributing it to any social background disadvantage (Fromberg, 2007:467; Penn, 2008:384; Republic of Kenya, 2006b:3; NAEYC, 1997; 2009), but rather to individual differences that might slow down the children’s progress through school.

It appears that Lenora values the preschool years as a foundation for success in later school years, cautioning that when a child fails to cope with preschool activities, it will have long-term negative effects for their later schooling. Stella also suggested that when the teacher identifies learning differences early, especially during this period, it is possible to ameliorate learning difficulties associated with the disability. She cautioned that what the teacher did at the preschool would have long-term effects on the child’s development. Her views corroborate my observation:

7.2.7 **PRINCIPLE 7: CHILDREN NEED SECURE, CONSISTENT RELATIONSHIPS WITH ADULTS AND FELLOW CHILDREN**

Principle seven states: “children develop best when they have secure, consistent relationships with responsive adults and opportunities for positive relationships with peers” (NAEYC, 1997:10; 2009:13).

Enid articulated the need for children to remain secure in their learning environment by her reference to one child. Lenora suggested that the free play opportunity for children in the morning gives them an opportunity to ease slowly into the learning activities. Otherwise, the other two teachers did not mention the issue of security for the children. Enid and Lenora said:
However, although this principle did not feature prominently in the discussion, all the teachers periodically released the children to go to the toilet. It also appeared that as part of discipline and maybe respect for authority, any child had the opportunity to excuse him/herself through the teacher if there was need to go to the toilet arose. In addition, the children had opportunities for outdoor play, besides time to take their mid-morning snacks. This principle did not feature prominently in the teachers’ discussion because security might not be a concern in this context. Moreover, issues relating to emotional expression were not appropriate in this context, where affection was not openly displayed. The teachers did not consider the security of the children in their classes as an issue because they did not perceive this context as emotionally or physically insecure.

7.2.8 **Principle 8: Multiple social and cultural influences on development and learning**

The eight principle states: “development and learning occur in and are influenced by multiple social and cultural contexts” (NAEYC, 1997:7; 2009:12). “What the communities believe is the correct way to work with children” (Prochner et al., 2008:189).

The teachers acknowledged the effects of the wider social context on the child’s development. Lenora used the children’s trip to Kisumu emphasized the role of children’s experiences on development. According to her, this was an opportunity for children to relate their weekend experiences to learning. However, Lenora limited her argument to developing self-expression language skills and confidence in speech:

[LE:...they enjoy the experiences, drawing, socializing, yah part of learning, news telling... and that one will make the child to be very happy and to like school very much [LE01A:522-530; 536]

[ST: and relate them whereby they can see at home I always see maybe mother wearing necklaces or whatever and when he comes to school, we make sure that they don’t find the school be so far much different than the things at home][ST03:760-01]

Stella acknowledged the role of the home environment in learning experience when she gave the children the opportunity to “thread beads”. In her view, the children should relate their learning experiences to their home experiences. The school and the church also play an active role in development. She also emphasized the need to articulate the
children’s entry behaviour into their learning, when she said she ought to teach according to children’s privileges and that she could not treat “children from the staff [University community] as those from the rural area”. In her view, those from the rural areas were limited to exposure to media, such as the television; hence she would need to prop up her English language with action words, because in her own words, “children differ in their privileges”. Belinda gave the children an opportunity to play using locally sourced materials. In her view, it was important so that the children could easily identify with the materials they saw at home. Both Belinda and Stella expressed their views about the multiple influences of the social and cultural background of the children:

\[ST: \text{‘if eeh this child comes, eeh lets say in a rural area, I will not ...deal with that child the same as the child who maybe is from the environment of the main campus or where he lives. ...are two different people. [The] one who is from the rural areas whereby they don’t even talk English cannot even greet you in that language. So I have to see that if I am going to use the English eeh language... I have also to express it to the rest, maybe in Kiswahili... and action so that they can understand}]\[ST02:27-37]

\[BE: \text{‘They also see the Omo tubs at home, so it is just the things they see. Maybe you would want to use the things they know better instead of bringing the things they have never seen...they will take interest to use it but if you bring something, they do not know they will not even touch it}]\[BE01:70; 72; 74]

Although the teachers appreciated the multiplicity of the children’s development contexts\(^{48}\), they suggested that parents’ concerns must also take precedence. In their view, the parents only got involved when their children failed to catch up academically. Stella, Lenora and Enid summarized the parent-school link in the following sentiments:

\[ST: \text{[ST: parent] does not understand eeh your curriculum or how you take steps with the teaching... Maybe if somebody brings a child to baby class after a week or at the end of the day he wants to see that, that the child already has written something, something on a book.]}\[ST02:226-230]

\[LE: \text{‘you see, we normally tell these parents to be coming to school monthly...or any time they feel like, to come and check on the children’s progress... we give them homework so that the child might be assisted at home, or when a here are those parents who do not see that the weakness is with the child. They see that maybe the weakness is with the teacher, so these parents end up...these parents, let’s say if the child doesn’t make... will lay the blame on the teacher...]}\[LE01:108-118-02]

\[EN: \text{[EN: because most of them (sic parents), they say Montessori method, it is a slow method, and they want their children to write ...]}\[EN04:301]

\(^{48}\) See the discussion under principle three; section 7.2.3 for a discussion on how variable social expectations might impact in interpretations of children’s educational experiences.
It is important to note that in the study context, parents rarely get involved in the classroom activities of their children or the school. Often school visits are on invitation or if they are concerned about their children’s academic progress. Enid’s comments showed a conflict in priority areas that originated from the parents. In this study, teachers perceived parents as interfering with their plan for children’s educational experiences. Divergence in social expectations of the aims and practice of early childhood education were apparent.

7.2.9 **PRINCIPLE 9: THE ASSUMPTION THAT CHILDREN ARE ACTIVE LEARNERS**

The ninth principle states: “Always mentally active in seeking to understand the world around them, children learn in a variety of ways; wide range of teaching strategies and interactions are effective in supporting all these kinds of learning” (NAEYC, 1997:7; 2009:14)

The assumption that children are active learners recognizes that children need to engage actively with their environment as part of learning. We discussed this theme in relation to the teachers’ beliefs about their use of learning materials. Although all the teachers perceived the use of materials favourably, apart from teacher Belinda, none of them engaged all the children in manipulatives. Lenora linked the children’s involvement in learning to their enjoyment:

[LE: When the hand is put in paint and the child prints on a paper, the child will be very happy. Even by the end of the day when they reach home, they tell their parents I have really done some good work you will come and see my work][LE01B:632; 634]

[ST… You have to start with those activities so that you can know that maybe a child has a problem with some senses][ST02:106]

[BE: there you will give the children moulding and then they discover by themselves. You will find some of them making letters… some of them making many things they see at home: It co-ordinates (pause)...the hands and an indirect preparation for writing …it makes the muscles stronger…] [BE01:457; 459;463;465]

[EN:Okay, it helps, at least to keep them to become independent and then movement of fingers] [EN04:12; 14-01]

49 See voyage five, the theme on silencing of materials
Stella limited her perception of material’s use to the identification of learning difficulties. Belinda perceived materials manipulation as an opportunity for self-discovery, for children to link their school experience to what they saw at home and for them to develop their physical dexterity. Choral reading and written task-based assessments did not reflect a commitment to the principle that children are active learners, who need to explore their environment using all the senses. In our discussions, they limited the choral engagement as part of “being active”, as suggested by some of their sentiments. For example, Lenora said

**LE:** so if I take most of my time trying to teach saying do this, try this, does this….most of these, child (ren) will be bored and start to play….so I just introduce and then I give them now and I say they read in turns…I introduced the child-centred method [meaning reading alone] that is used mostly so that child will enjoy learning][LE02:214-228]

**EN:** If I decide to introduce, to use the material here I will drag behind because Montessori is a very slow method of teaching …if I say that I am going to teach using the materials: I will drag behind: I will not introduce all the things that I am suppose to introduce …we have to put them aside.][EN02:424; 456; 458; EN04:225]

Although the teachers articulated the importance of child engagement with play, their beliefs were higher than their practices. Overall, the teachers in this context believed that engaging children with materials slowed them down in their content coverage, as Enid’s comments summarized the reservation to engage children with materials. Overall, they endorsed the use of materials or free play, a process that would engage learners, but they did not do so. The fact that children teachers did not give children the opportunity to play also might reflect the society’s interpretation of play. In this context, play connoted ‘doing nothing’ or ‘wasting time’. Often, children do not get such free time at homes where they are expected to do house chores (some as early as five-years-old), as part of responsibility development. Even if the child is doing a mundane task, such as sweeping the house or the earthen compound, or looking after calves, goats or sheep, this is a better ‘play’ than the unproductive type of play where there might not be tangible results.

### 7.2.10 Principle 10: Play is an integral process of learning

The tenth principle states: “**Play is an important vehicle for developing self-regulation as well as for promoting language, cognition and social competence**” (NAEYC, 1997:8; NAEYC, 2009:14).

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50 For a discussion of this observation, see the section on silencing of materials among three teachers in Voyage 5.

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Voyage 7: Data within the DAP framework and the bioecological systems theory
Smidt (2007:8-9) distinguishes the value of play for children that “what makes play is that it is something that the child has chosen to do…to follow his interest…caries no risk of failure”, and Sroufe et al. (1996:387) affirm that “play is the province of the child”. Froebel proposed “to receive the external world man has his senses…physical and sensory training is, therefore, important even in the early years” (in Lilley, 1967:102).

Although children at the preschool ought to learn through play, except for the DICECE baby class, the three other classes did not provide opportunity for play among the children. In fact, what came across in our discussions of the use of play-based activities, teachers might have perceived play as perhaps incompatible with the pressure for academic tasks.

Therefore, the teachers seemed concerned that play activities were time-consuming. The Montessori teachers articulated the concern that they needed to prepare children to fit into a non-Montessori primary school. Hence, if they engaged the children with too many materials instead of work-based sheets, children might not be ready to transition to a non-Montessori primary school. Due to this concern, both Montessori teachers thought that the Montessori system was a slow method. In their view, they could not implement the Montessori method using all the materials because they had to prepare children for non-Montessori primary schools. Stella’s view summarizes the pressure felt:

[ST: ‘because with Montessori, if we say now we are going to do the real Montessori, maybe all the time will be consumed by, these materials because they are so many. You will not have time to teach this child to know numbers 1-20, how to calculate mathematics, how to read…’][ST01:201]

[LE: Yah so the teachers we yaani (that is) we take it more seriously in senior class, Yah we do not give them to play a lot][LE01B:216; 218]

Consequently, Stella suggested that including afternoon sessions would give them time to engage children with Montessori materials. Moreover, Lenora thought the children could have passed the stage of play. She emphasized that at the level of a five-year-old “we are very serious” and that “we don’t allow them to play too much”. She quoted one of the ‘serious’ children in her class who tells the others “we come to school to learn”. This illustrates the disconnection between play and learning, as observed by Howard, Jenvey and Hill (2006) in their study of children who associated teacher absence with
play. This also reflects on how early educators use play in the early learning classrooms, as a structured process, rather than blending it with academic skills opportunities.

7.2.11 **PRINCIPLE 11: NEED FOR CHALLENGING EXPERIENCES**

The eleventh principle states: “development and learning advance when children are challenged to achieve at a level just beyond their current mastery, and also when they have many opportunities to practice newly acquired skills” (NAEYC, 2009:15).

Stella talked about providing the children with challenging experiences that not only call for use of the immediate children’s visible experiences, but also those that are of an abstract kind. The other teachers did not articulate this principle because it did not reflect in their practices. Stella illustrates an example that challenges her sentiments:

> [ST: ‘because with Montessori, if we say now we are going to do the real Montessori, maybe all the time will be consumed by, these materials because they are so many. You will not have time to teach this child to know numbers 1-20, how to calculate mathematics, how to read…’][ST01:201]

> [LE: Yah so the teachers we yaani (that is) we take it more seriously in senior class, Yah we do not give them to play a lot ][LE01B:216; 218]

7.2.12 **PRINCIPLE 12: CHILDREN’S EXPERIENCES SHAPE THEIR FUTURE LEARNING AND DEVELOPMENT**

The twelfth principle states: “children’s experiences shape their motivation and approaches to learning, such as persistence, initiative, and flexibility; in turn these dispositions and behaviours affect their learning and development” (NAEYC, 2009:15).

This last principle did not feature in the study, except when the teachers referred to the cumulative effects that lack of adequate preparation for the interview and transition academic requirements could have on the children’s future learning. For a detailed discussion of this theme, refer to the discussion on principle two and five.

7.2.13 **A CONCLUSION ON THE LINK BETWEEN THE TEACHERS’ BELIEFS AND DAP**

In the discussion that juxtaposes the teacher’s beliefs within the DAP 12 principles framework, it is clear that most of these principles exist within the repertoire of teachers’
experiences and beliefs, although they did not implement all the principles. This study found that teachers’ beliefs and children’s educational experience do not correspond in practice to a DAP framework, due to perceived pressure for task-based assessments. In three classes out of the four, the teachers used direct, rather than child-centred approaches to learning. This negates the principles of DAP which advocate a child-centred approach to learning at the ECD.

However, in line with the current DAP recommendations, for a context-specific cultural considerations, it the DAP principles need to be applied selectively. Moreover, this selectiveness introduces relativity to context-specific considerations for DAP. As observed in this study, teachers’ beliefs link to their perceptions of various dynamics in their context, including the perceived role of the preschool, their job retention, parents’ expectations and the perceived competitive environment in which they practice. These dynamics are linked to the economic model of education, which might express the value attached to education in this context. Although I note the possible link between preschool provision in Kenya to the economic model, it is beyond the scope of this thesis to discuss it in detail.

Prochner et al. (2008:198), while limiting their discussion to the use of materials, introduce the concept of deep versus surface culture when interpreting what is appropriate in a context. Therefore, they conclude from their study that cultural expectations explain the differences observed among children attending preschools in Canada, India and South Africa, and that political, historical and social dynamics are likely to influence preschool practices.

In conclusion, the teachers’ beliefs about developmentally appropriate educational practices exist within the spectrum of the twelve principles. While some of these principles featured in the children’s educational experiences that became the basis of the elicited interviews, therefore more prominent, others did not feature in the discussion at all, because they were missing in both children’s educational experiences and even teachers’ conceptual sentiments. In the following section, I explore how the bioecological theory might provide the framework to interpret the findings of this study.
7.3 GOING DEDUCTIVE – THEMES INSIDE THE BIOECOLOGICAL THEORY

...from an ecological viewpoint, I suggest that the impact of daycare and the preschool in the nation’s families and society at large may have profound consequences than any direct effects for the development of human beings in modern industrialized societies (Bronfenbrenner, 1979:165).

7.3.1 INTRODUCTION

Theory in qualitative research is fundamental to framing, understanding and interpreting the research data, “whether consciously recognized or even identified” (Mertz & Anfara, 2006:189) and that:

Theory situates qualitative research clearly within the scholarly conversation, adds subtlety and complexity to what appear at first glance to be simple and allows a repertoire of understanding diverse perspectives of the same phenomena.

I concur with Mertz and Anfara (2006:192-93), that theory provides a lens through which to read research questions and to interpret and discuss results. In the following section, I present an analysis of the findings within the bioecological systems theory. Bronfenbrenner (2005; 1979) and Bronfenbrenner and Evans (2000) discuss five levels of the bioecological systems theory, namely: the microsystem, the mesosystem, the exosystem, the macrosystem and the chronosystem. Each of these levels will be defined as it is discussed. I choose the bioecological theory because of its ecological relevance of the dynamics of preschool beliefs and practices. Marshall (2004) notes that the current trend in early childhood research is to map children’s early educational experiences to their ecological settings in which they grow and develop. A social and cultural interpretation of early childhood practice provides situated, context-specific conclusions. Edwards (cited in Kilderry et al., 2004:26) reinforces the need for practices to be understood within context, and “for research to be able to illuminate and clarify practices, it needs to be able to accommodate the complexities of practice in its contexts”.

In this discussion, I link teachers’ beliefs and children’s educational experiences to the different levels within the bioecological systems theory. Depending on the epicentre of discussion, there can be several ecological systems, even within one system. The
discussion will draw from the observed practices and the emerging belief themes as presented in chapter five and six.

In voyage five, the themes discussed were task-based and copying (teaching strategy), silence of materials (use of materials), content/task-based plans (scheduling), task-based and choral reading (assessment), and finally, group approaches, with limited differentiated copying tasks, to children’s educational experiences (consideration of individual differences). In voyage six, I noted that teachers experienced various sources of pressure, namely: the interview, parents who demand written work, a different transition curriculum and/or requirements, colleague influence, and a response to a competitive school environment. In the discussion, I will subsume the themes into the different levels of the bioecological systems theory.

It is difficult to isolate the themes and fix them into singular levels of the bioecological systems, for example, copying and task completion which might originate from the microsystem, could also fit within the exosystem, if a teacher ‘borrows’ methods and content from another school. This might be through ‘own collection’ or if a teacher imports methods to introduce to other teachers. However, to provide a systematic approach to the discussion, I sort these themes into the various systems: the microsystem, the mesosystem, the exosystem and the macrosystem. However, this does not imply that once a theme is located with a particular level within the bioecological system theory, it cannot apply at another level. This is because the effects and interactional relationships are non-linear, active and multilevel over time and the effect of proximal processes. Bronfenbrenner and Morris (in Bronfenbrenner & Evans, 2000:118) define proximal processes to “involve a transfer of energy between the developing human being and the persons, objects, and symbols in the immediate environment”. Therefore, it is possible for a theme to exist across ecological domains, depending on the impact it has on the ‘system components’ at the level under discussion. For example, the theme on the interviews that influenced all the constructs of the study is located at all levels of the bioecological systems theory, because of the synergistic effects it had on the teachers’ beliefs and children’s experiences at all levels.

While the teachers mentioned some of the factors shown in figure 45 during the interview, I inferred some of them from the discussions, general literature review on preschool education in Kenya, as well as my own observations based on experience and
more generally. I theorize to provide an holistic picture. It is important to note that while
the diagram illustrates a general overview of some of the factors discussed, the specific
themes and how each of them fits within a certain level of the bioecological systems
theory proceeds in the discussion under each of the levels identified; microsystem,
mesosystem, exosystem and macrosystem levels.

**Figure 45:** Factors in the bioecological systems that affect preschool teachers’
periences (Adapted from Bronfenbrenner, 1979; 2005)

In figure 45 (above), I provide a general preview of some of the factors that I extrapolate
from the study findings, to provide a more generalised view of how some of the beliefs
interrelate with each other in the bioecological systems framework in the Kenyan early
childhood context.
7.3.2 CONNECTING THEMES TO THE MICROSYSTEM EXPERIENCE

Bronfenbrenner defines the microsystem as “the structures and processes taking place in an immediate setting containing the developing person (e.g., the school, classroom, playground” (Bronfenbrenner, 2005:80). The themes emerging from the study that fit within the microsystem include task-based copying and choral reading, while the teacher belief factors that fit within the microsystem include pressure from parents for skills-based teaching and colleague influence to use divergent approaches. In this study, I assume that the microsystem under focus is the school, with multi-layered subsystems that include teachers in the same school, children and parents, with each of the complex components affecting each other (Bronfenbrenner, 1979:3). According to the ecological systems theory, components of the microsystem do not exist independently of each other, but rather affect each other as they interact face-to-face. As Bronfenbrenner noted (2005:6):

Over the life course, human development takes place through processes of progressive more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its external environment.

From this statement, I make three assumptions to guide the discussion: that the person interaction has many potential levels, with both people and objects. Secondly, the interacting organism is a ‘psychological’ system with physical needs, motives, and behavioural dispositions, guided by ‘thoughts’ or the psyche. Thirdly, the interacting person has expectations for an outcome, arising from the interactive process (Bronfenbrenner 1979:3-4). Therefore, as we discuss the microsystem components that I identify as children, parents and teachers, we appreciate the intricate, non-linear process through which each affects the other in their course of development (Bronfenbrenner, 1972; 1979; 2000; 2005). Figure 46 (below) is an illustration of how the subsystem components interact.
FIGURE 46: The direction of interaction by the microsystem components within a mesosystem level

At the microsystem, direct interactions proceed between the teacher and the child [A], as well as between the child and their parents [E], and the teacher and the parent [F]. The interaction between the teachers and fellow teachers within the same school is both bidirectional and indirect. Whereas teachers explicitly share teaching approaches, as illustrated by arrow D, at other times, methods might be perceived as illustrated by arrow C, thus providing indirect pressure to the ‘perceiving’ teacher (concerned teacher) to adopt them. Although children might not have a direct interaction with those teachers not teaching them (see B), they ‘experience’ the trickle effects from the interactions that their teachers have with their colleagues (see D). It is worth noting that these interact at the mesosystem, which does not consist of any tangible component, but rather how those interacting perceive and interpret their life events.

Neither do parents have a direct link with the ‘other teacher’ (see G), (not teaching their child), but their expectations benchmarked on comparison with other teachers in the same school influence how the teacher interacts with their child in the learning process. Therefore, at the microsystem level, other teachers within the same school, as well as parents with children in the school, or even in other schools, affect how teachers plan for children’s educational experiences. At the microsystem level, the overarching concern about the interview is not direct (see H), but has a psychological effect on the teachers’
beliefs and children’s educational experiences. The direct sources of pressure at this level are the parents. All teachers noted that they were concerned to give parents feedback on their children’s performance [EN01:332-336; ST02:226-230; BE01:212; 214; LE0A1:108-118-02]. To add, Belinda observed that parents use other schools to gauge the quality of the school their child is attending. Specifically, she noted that parents compare different schools in their syllabus coverage, children’s learning activities, and the overall performance of children in academic skills [BE:204-220; LE01B:320-334].

To illustrate further on the various levels of interactions among people and objects in the microsystem and their potential effects on behaviour, the teachers suggested that their colleagues had influenced the way they taught. Stella talked about using a mathematical approach introduced by one of the teachers in her school [ST03-444-01; 454-01; ST03-526-538-01]. Enid perceived pressure to use a divergent non-Montessori approach used by other teachers, such as the ‘writing over’ method which is faster than the sensorial approach to teaching letters [Ref EN04:26], illustrating a perceived, rather than implicitly shared method. Belinda, who is originally trained as a Montessori teacher but now teaching in a DICECE school, observed that she had changed to teach language through picture words, rather than using the letter sound system in which she trained as a Montessori teacher (Ref BE:536-544). Lenora articulated how teachers had responded by including ‘teachers’ own collection’ to prepare for the expected interviews [LE01A:670; 672; 673; 674; LE01B:268-270]. Although teachers’ own collection also fits at the exosystem level (because of the interview and comparison with other schools), it is applied at the microsystem level because this is the level at which the teachers apply ‘their own collection’. Researchers note that a range of experiences is likely to influence teachers’ beliefs (Schoonmaker & Ryan, in Cassidy & Lawrence, 2000:193-4; Lightfoot & Valsiner, in Cuskelly & Detering, 2003:45).

To summarise the preceding discussion, we note some factors located at the microsystem that operate at the mesosystem level that might explain the themes of the study. These include pressure from fellow colleagues to diversify the teaching approach, and to introduce non-preschool curriculum content through ‘own collection’, as well as pressure from parents to teach academic content and to measure up to other schools that perform well. All these factors interplay at the mesosystem, which is the ‘psychological level’ of interaction to affect the children’s educational experiences and teachers’ beliefs. In the
following section, I connect the research themes to the exosystem level, the level after the microsystem and the mesosystem.

### 7.3.3 **CONNECTING THEMES TO THE EXOSYSTEM LEVEL**

#### 7.3.3.1 **Introduction**

Bronfenbrenner defines the exosystem to

…encompass the linkages and processes taking place between two or more settings, at least one of which does not ordinarily contain the developing person, but in which events occur that influence processes within the immediate setting that contain that person… (Bronfenbrenner, 2005:80).

Three issues located at the exosystem that explain the observed children’s educational experiences and emerging teachers’ beliefs are: a competitive school environment; the interview that arises from competition for limited vacancies in standard one; and teachers’ responses to the prevailing competition. In figure 47 (below), the interview is at the core of the observed practices, but also the teachers’ *job security* and parents’ concern to *access* limited good public resources. These have a peripheral influence on the interactions at the exosystem level, hence the directional arrows that do not link to any particular component. I discuss in the subsequent sections how the core components interrelate to influence children’s educational experiences.

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**FIGURE 47:** The direction of interaction by the exosystem components
7.3.3.2 Responding to a competitive environment

All teachers anchored their arguments on the fact that schools compete among each other to produce the best results and so retain or increase enrolment. Lenora and Belinda, who were the DICECE teachers, were under pressure to compete with the private schools, as part of increasing the enrolment of their school seemed. The Montessori preschool is classified as a private school in this setting. Besides scheming to their own collection, all the teachers were concerned that parents would want to compare their performance to that of other schools, where some of their children were attending. Parents’ demand to compare performance between schools, perhaps after seeing another school perform better [Refs ST02:226-230; EN04:303-311; BE01:212-214; LE01A:696-709]. This motivated these teachers to focus on skills-based learning, as indicated by Lenora’s comments that they teach the curriculum that is not even done by children in the lower primary school [LE: ‘like provinces and all those that do not even come in lower classes’] [LE01A: 686-690].

Enid highlighted what she observed as peculiar characteristics of the particular setting (my study setting). In her view their focus was more on academics than the handwriting of the child, in contrast to a school in town, as she observed “because they know that
may be if it is a Montessori school, they know they will do well, that is what they believe [EN05:303]. Enid’s and Stella’s observation that this is a unique environment, confirm my earlier assumption that the relatively few sought-after school put pressure on the teachers and the children to perform to the test. Enid said ‘whatever they do there, it is tough, they do not bring things like one plus one or two plus two...because of that, we are a bit ahead...most of the things we do is to run, we are trying to chase the...what can I say, time or what?’” [EN01:332-336].

Enid attributed this focus to the demands for academic skills necessary for school admission that she implied had become more stringent with time. Stella corroborated the observation that the academic requirements in the Montessori preschool were more and higher than was her experience in other schools that she had taught in before. She expressed her apprehension “maybe if somebody brings a child to baby class after a week or at the end of the day he wants to see that, that the child already has written something, something on a book” [ST02:226-230].

7.3.3.3 Interviewing for admission

Resulting from a competitive school environment, some schools use interviews to select and eliminate low-performing children. Interviewing children for admission is a unique phenomenon defining some preschools in Kenya, particularly those observed. In any case, Mwaura et al. (2008:238) and Biersteker et al. (2008:2280) observe that preschool in Kenya, although not mandatory, is part of school transition. Unlike some settings that freely admit children to standard one, others such as the ones in this study site and other urban settings, require them to qualify through an entry interview. Therefore, since the interview is not a national requirement, it is a creation of some schools because it is not a government policy for admission to standard one. Although the interview serves to hold teachers accountable to the parents and other stakeholders, it also puts pressure on them to teach to the test. Consequently, preschool teachers face pressure or even feel threatened by the interview. The participating teachers were categorical that their educational practices was partly to prepare children to pass the interview and to transition successfully and to fit with the curriculum demands of the primary school [e.g. Ref ST01:201; EN04:167-01; BE01:204-220; LE01:630-634].
Competition to enrol children in the neighbouring primary school put pressure on Enid and Lenora to focus on academic skills. In their experience they request to see the standard one interview examination papers after the interview to help them prepare the children to perform better in future (Ref: LE02:96-114; EN01:348-352). Enid was emphatic that parents chose Tumaini Montessori School because they thought it performed well in the interview [Ref EN04:303; 305]. Although Enid and Lenora focused to prepare children for the interview, Enid was empathetic about the demands for academic skills, beyond the preschool. Therefore, in her view, it was helpful to prepare children for the rigour of the primary school curriculum demands.

Closely linked to the competitive environment and the interview requirements is a concern by the teachers to teach beyond the preschool curriculum. Lenora referred to scheming to their own collection [LE01A: 670-674], that they acquired through colleagues within the same school and from other schools, especially those teaching in the urban centres. Teachers ‘scheming to their own collection’ confirm the influence of the interaction of some of the exosystem component beyond the immediate environment of the child and the teachers.

From a personal observation of the dynamics of education provision in Kenya at all levels of education, parents compare the performances of schools within a setting. In this setting, the list of the children’s performance in the interview, including the details of their previous preschools, is usually displayed in a public places. This has implications for both the image of the school and for the teachers presenting the children for the interview. The teachers in this setting were concerned about the public perception of their performance, besides negative reactions from parents if their children did not perform well in their examinations. Enid succinctly summarized her perception of what was required of the preschool child: “good handwriting, do math, English, neat clear!”

That the setting was a University also influenced many values related to childcare. It is possible that teachers also expect good performance from their school that is located at a University setting. High expectations for performance might predispose teachers to ‘self-imposed’ pressure to meet such expectations. Alternatively, parents might reinforce high expectations because their children attend a school in the University. Parker and Neuharth-Pritchett (2006) observe that teachers experience self-imposed pressure, especially if their expectations for children’s performance in skills originate from
teachers themselves. Conversely, what is evident in the current study is the push to admit children on the ‘sought after-schools’ basis (Mwaura et al., 2008:238), one of which is located in the current study location. This has continued to put pressure on the teachers to prepare the children to pass the entry interview.

Overall, the two factors interrelated that influence teachers beliefs and their practices at the exosystem are practices that respond to a competitive environment, and those that equip children to perform well in the transition interview. These practices include focusing on academic skills and teachers including their own collection in the preschool curriculum. Although all these dynamics could subtly explain the observed children’s educational experiences, the picture is not complete without considering factors whose genesis is in the macrosystem level. I discuss the dynamics of education provision with a focus on preschool provision in the next section that considers the macrosystem components.

7.3.4 CONNECTING THEMES TO THE MACROSYSTEM LEVEL

7.3.4.1 Introduction

In the following discussion, I focus on policies that directly relate to early childhood provision, teacher employment, the role of partnerships, and the absence of direct government funding. Further, I discuss how an examination oriented system, the role of the media, and preschools that are separate from the primary school influence teachers’ beliefs and children’s educational experiences. The issues discussed at this level are social, cultural, economic and political dynamics of early childhood provision in Kenya. All these factors operate at the Kenya government and society levels, which are at the macrosystem level (figure 48, below).
Bronfenbrenner identifies a macrosystem as:

[An]…overarching pattern of ideology and organisation of the social institutions common to a particular culture or subculture…. [It] comprises of the patterns of the micro-, meso-, and exosystems characteristic of a given society or segment thereof. It may be thought of as a societal blueprint for a particular culture or subculture (Bronfenbrenner, 2005:81)

Kilderry et al. (2004:27) observe that “teaching and working with young children is political, and decisions about young children’s welfare and education are being made all the time”. Such decisions include government policies that relate to maternal employment and provision of early childhood services, that are likely have an indirect influence on the teachers’ beliefs and practices. Bronfenbrenner stresses the overarching effect that policies can have on everyday events that result in human development:

Public policy is a part of the macrosystem determining the specific properties of the exo-, meso- and microsystem that occur at the level of everyday life and steer the course of behaviour and development (1979:9).
By providing a synthesis of how some of the policies, such as NCLB in the USA, are intricately linked to the DAP, Goldstein (2008:254) demonstrates how culturally, economically, and politically driven policies affect early childhood provision. In Kenya too, some education policies provide insight into early childhood provision. For example, the government does not employ preschool teachers, nor are they part of the Teachers’ Service Commission (TSC), the government body that employs teachers for the primary and secondary levels of education (Republic of Kenya & UNESCO, 2005; Adams & Swadener, 2000).

### 7.3.4.2 Partnerships in preschool provision

The Kenya government has enjoined partners to provide early child education services. Consequently, different stakeholders and partners manage and finance most preschools. These include municipalities, parents and private sector who manage most preschools, with no direct government financial support (Adams & Swadener, 2000; Biersteker et al., 2008; Mwaura et al., 2008:238; Republic of Kenya & UNESCO, 2005; Republic of Kenya, 2005; 2006b; 2007; Swadener et al., 2008:413). Resulting from these partnerships are three issues that might influence preschool educational practices. These are; funding and related rationale for preschool provision, teacher-employment and job retention and divergent stakeholder priorities. Teachers too are partners in the provision of early childhood services, although this might not always be apparent. Regardless of the early childhood curriculum guidelines provided by the government to guide ECE practices, a divergent stakeholder involvement and their subsequent interests in preschool derails the full implementation of such a curriculum.

To cite an example, accountability to parents and school management, for the sake of employment retention, compel the teachers to focus on preparing children to pass the interview. Consequently, although the ECE guidelines are specific about the need for teachers to use DAP, teachers are compelled to use teacher-directed approaches that ensure a successful preparation for school transition. Evidently, stakeholder values and priorities in this instance vary as Katz, (1995:130) postulates.

Some of the teachers expressed concern with their employment. In Kenya, there is no government policy framework for the employment of preschool teachers, but rather parents and other stakeholders employ teachers and manage preschools (Mwaura et al.,
2008: 238; Biersteker et al., 2008:233). This put pressure on teachers to teach academic subjects. Stella observed that if the children failed to perform in the interview, she would lose her job [ST03:334; 338-02; 356; 358-02]. Lenora had the same opinion [LE02:677-679]. As observed in this study, focus on academic skills reflects on the conclusion by Tierney (in Robinson & Diaz, 2006:51), that teachers are now “managers who provide children with strategies to pass tests”.

Teachers focused on teaching skills to reflect parents’ concerns, as Enid’s comments illustrate:

[EN: Mmh, you know the only thing they are always worried about is for their child to go may be primary school, a good primary school][EN04:303; 307; EN04:311]

This is a problematic stakeholder prioritization on what areas of child development to focus. On the wider level, Robinson and Diaz (2006:51) link the need for testing and standardization to the competitive global market, which puts pressure on teachers to teach to the test, as different stakeholders hold them accountable if the children fail. Teachers’ focus to prepare children to pass examinations so that they can retain their employment reflects the economic model of education. Currently, society has increasingly perceived children, not for their sentimental value, but their economic value (Robinson & Diaz, 2006:51). This has a direct link with teacher employment.

Lenora’s comments illustrate the economic model aimed at increasing school enrolment to be able to retain their employment: “[LE: If the children do not make to standard one, we shall lose children…parents see the school, that does well…takes more children to standard one…] [(Ref. LE01A:696; 698; 705; 707; 709; LE01B:320-334]

7.3.4.3 Examination oriented system and the media

The observations made in the children’s educational experiences and the emerging teachers beliefs directly relate to the dynamics of education in Kenya and particularly preschool education, where parents seek to enrol their children in ‘sought-after’ schools (Mwaura et al., 2008:237). The existence of private schools that do well in national examinations, a comparatively selective process of education, which favours those who pass examinations, and a highly examination-oriented system of education (Prochner &
Kabiru, 2008:126), partly explain the observed practices and beliefs. There is a perception among the stakeholders that some schools, at all levels, are better than others, hence a survival need by some schools to maintain the status-quo, while others strive for excellence, or to catch up. The Kenyan media and society has sometimes referred to this trend as the “Mean-grade syndrome”. Mostly, the Kenyan system of education is highly examination-oriented, with selection to high school and university made solely through examinations administered at the end of each school cycle. It therefore looks like the teachers realize the demands of the primary curriculum and use it as a basis for teaching.

The Kenyan media have also played a role in accentuating the performance debate. Until recently, the Kenya National Examinations Council (KNEC) used to rank schools according to their performance. However, with the Kenya Certificate of Secondary Examination (KCSE) results released in February 2009, the focus on ranking shifted from the school to the candidate. Although this still maintains a level of pressure to excel among candidates, it lessens pressure on competition among schools. Apart from the interview as a source of pressure on some preschools, the implication for ranking and publication is an indirect link with early childhood education, where primary schools might still want to admit only the best preschool children to their schools.

Generally, the examination-oriented system has created a competitive psyche in the social system, which places emphasis on “in what position were you?” or “what was your mean score?” in the Kenya school system. Enid suggested that parents assess and enrol their children into primary schools that perform well in KCPE [EN04:303; 307; EN04:311]. Lenora perceived that private schools have scaled up the curriculum, thus intensifying the academic excellence requirements in the competitive environment [LE01A:646-658].

7.3.4.4 Separate preschools from primary schools

Most preschools are separate from the primary schools. Maybe if the preschools had primary schools linked to them, the teachers would not be overly concerned about their children failing to gain admission. This has implications for access, admission and

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51 The K.N.E.C now ranks the top 100 candidates from each province, and the national media houses reproduce these lists in their dailies, the day after the results are released.
continuity. Biersteker and colleagues (2008:233) conclude that there is disjuncture between preschool and primary school in Kenya, since preschool and primary school training exist in isolation. Teachers were concerned that the admission interview excluded their children from the primary school. Lenora said she reserved no effort in ensuring that her children pass the interview [LE02:671-675]. In addition, she felt that the primary school admission should not engage children in interviews, rather, preschool teachers should be empowered to recommend children for primary admission [LE02:691; 693]. Stella perceived pressure to prepare children to transition from Montessori curriculum to the mainstream curriculum [ST01:201].

Although a primary school attached to the preschool might not be a panacea for the felt pressure to teach academic subjects, it would lessen the pressure for both parents and teachers to seek admission for standard one. However, as mentioned, the social and economic dynamics in education provision in Kenya, which is not limited to preschool, but also to all levels of education, mean that schools that perform better in national examinations are generally more valued than the lesser performers. Therefore, even if a preschool attached to the primary school lessens pressure for access, this does not eliminate the quest for ‘better schools’, because parents still wish to admit their children in ‘sought after’ schools. Worse still, UNESCO (in Biersteker et al., 2008:241) warns that there might be a focus on academic skills at the expense of the whole child, if the preschool is within a primary school. This raises a conceptual issue to beware, even if a preschool co-exist with a primary school.

7.3.5 A CONCLUSION: DYNAMICS OF THE BIOECOLOGICAL SYSTEMS OF PRESCHOOL PROVISION

From the discussion on the bioecological systems theory, I observe that there are various components both in person (teachers, parents and children), and objects (materials), which also include interviews that combine to provide insight about the various observations made in the study. At the microsystem level, I observe that although teachers and parents interact, the teachers’ perception of the interview and concerns from parents for school transition provide additional explanation for the dynamics of school transition. These four components; parents, children, colleagues in the same school and the perceptions about the interview, interact in a mesosystem paradigm to produce the observed practices. At the exosystem level, pressure from parents takes a peripheral
effect, while the direct effect of the interview creates a competitive school environment and teachers’ strategies for coping, with the competition taking centre stage. At the macrosystem level, the impact of the policies, such as enjoining partners in preschool provision; absence of employment policy for early childhood teachers; absence of government funding; and an examination oriented education system, impacts directly or indirectly on early childhood education. Therefore, taken singly or together these factors explain the teachers’ beliefs and children’s educational practices within a DAP framework. As discussed, what contrasts with the recommendations of DAP is actually appropriate if all the factors discussed within the bioecological systems are taken into consideration. In order to embrace cultural multiplicity and variable expectations of the preschool, I seek to advance a seesaw model to help understand and modify the DAP framework to suit contextual realities.

7.4 ADVANCING A SEESAW MODEL OF DAEP

7.4.1 A GENERAL INTRODUCTION

In the following section, I integrate empirical and theoretical literature to advance a seesaw model as an alternative to interpret and to understand DAP in cultural contexts that varies in their focus of children’s educational priorities. The discussion of the seesaw model is juxtaposed with the DAP framework as advanced in the early childhood literature, while the use of the term developmentally appropriate educational practices (DAEP) in this section is the new framework advanced in this section to emphasize the educational component in the DAP framework. The discussion is divided into three parts: first, the DAP framework is restated to provide a platform to discuss in the second part, the various points of equilibrium postulated for the seesaw model. The third part of the discussion relates the different points of equilibrium to early childhood literature on teachers’ beliefs about developmentally appropriate practices. In the section following, I provide an overview of the seesaw model.

7.4.2 AN OVERVIEW OF THE COMPONENTS OF A MORE INTEGRATED DAEP MODEL

From the findings of the current research about children’s educational experiences and the factors that are likely to impact teachers’ beliefs about DAEP, and the literature in DAP in general, I integrate four implicit and explicit components in the learning context.
to present a comprehensive framework. Such a framework facilitates a balance between emphasis on academic skills and the holistic approach to child development. In this developmentally appropriate educational framework, I link four intersecting components that ought to form a DAEP framework. These are: 

- children’s developmental needs, 
- teacher decisions (as agents of themselves and of the schools they serve); 
- schools’ objectives (as agents of themselves, of parents that they serve, and as custodians to implement education policies); 
- social and political considerations (the purpose for which preschool education is provided). 

I present these factors as circles whose meeting point should form the basis of a balanced DAEP framework. The components of DAEP intersect in teacher-directed/initiated and child-centred/initiated processes that provide a balanced DAEP. Figure 49 (below) illustrates the components of the DAEP.

**Figure 49: Components of a more integrated and balanced DAEP**

From the theoretical and empirical perspective, there is a consensus that children’s holistic development ought to guide a DAP framework (Bredekamp & Copple, 1997; Charlesworth, Hart, Burts & DeWolf, 1993:12-3; Charlesworth, 1998; Ludlow & Berkeley; Jalongo et al., 2004:144; Kostelnik et al., 2004: 16-7; Philips, in Klein & Chen, 2001:31; NAEYC, 1997; 2009). Edwards (2005) argues that embracing the constructivist paradigm for early childhood education, as the DAP framework suggests, predisposes the child as “the lone scientist”, even if he or she is actively constructing knowledge. What is needed in a DAP framework are purposive activities, so that
teachers do not “leave children to their own devices”, even when teachers embrace play as a method of teaching (Stipek, 2007:742).

Conversely, within the current DAP framework, there is a lack of an explicit approach for teachers to include academic skills in children’s development, even though these are requisite to their later functioning at school. The result has been contentions, regarding the DAP framework and whether it is applicable to all contexts (Penn, 2008). Moreover, contentions also exist about how and whether early educators should provide children with academic skills (Stipek, 2007; NAEYC, 2009).

Therefore, I include the educational component in the current DAEP framework, whose exclusion has resulted in the problematic interpretation of how to include academic skills in child development. To include the education component would provide a basis for assessing DAP as a curriculum framework, rather than a general framework that addresses ‘appropriate practices’ for children. Grisham-Brown et al. (2005:21) further warn that the DAP framework alone does not meet the definitions of a curriculum framework, despite its significance in guiding interaction with children and developmentally appropriate skills. In their view, a curriculum framework consists of assessment of children’s developmental level; scope and sequence of the developmental areas; a framework to address children’s individual needs; the direction of interactions and daily activities; use of materials; the organisation and use of the learning environment; and procedures for monitoring children’s learning processes.

Although the DAP framework is a standardized document, Grisham-Brown et al. (2005:21) note that “standards are not standardized” but rather depend on the competencies required of children (Kurtenbach, in Grisham-Brown et al., 2005:23). Such competencies vary from one context to another, depending on the social and cultural purposes which education serves, and the values and priorities of stakeholders, who include policy makers, educators and community members (Grisham-Brown et al., 2005:23). Therefore, the content of DAP that should consist of a socially derived curriculum framework is equally important in this new DAEP.

The DAEP framework assumes dynamics that influence the way a teacher embraces DAP template. However, I argue for the centrality of teachers’ presence in the new DAEP framework. Although they are not central in figure 46, their role in implementing
the DAP framework cannot be overstated. Smidt (2006:63) notes that in the early childhood curriculum, the *process* is as important as the *product* or the outcome.

In my view, the DAP framework only exists as a guide and only becomes a reality upon its implementation *by the teachers*, through a *process*, with its success or failure depending on *the teacher*. The question that arises therefore is, ought such a very important component in the success of DAEP be subsumed in the DAP framework?

Clearly, even such variable and often vague factors, such as parents’ expectations, schools’ visions, and teachers’ employment policies that are not included in the framework, influence the implementation of DAEP. Therefore, I argue that the conditions for the successful implementation of DAP lie beyond the classroom interactive process, but most significantly, it might be that teachers have a more important role in the implementation of DAP than previously acknowledged, that is more than just serving a transmissive function.

According to Clark and Peterson (in Cassidy & Lawrence, 2000:184), teachers are “clinicians who diagnose learning problems”, and seek solutions to them. Lee (2006:433) cautions that “a teacher is a professional … who has more in common with physicians, lawyers and architects than with technicians who execute skilled performances according to prescriptions or algorithms defined by others” (Clark & Peterson, quoted by Lee, 2006:433). Lee (2006) is concerned that preschool teachers rarely find a way to express their disquiet.

I agree with the authors that teaching is not a scripted process, as implied by the DAP template. Therefore, the model that I advance, based on the current study, does not assume the teachers’ presence in the DAP framework. Rather it explicitly includes the presence of teachers in the new framework for a more balanced DAEP. Since teachers’ intentions, actions, voices and goodwill are the bases of a functional DAP (Lee, 2006:440). NAEYC (2009) acknowledges that ‘the how’ is not a new question in DAP, yet the key to the ‘how’ lies with the teachers (Katz, 1995:100). In the seesaw model, the teacher plays a valuable role in balancing between competing priorities. In the following section, I discuss the dynamics of the seesaw model.
7.4.3 THE SEESAW THEORY/MODEL

The seesaw theory has its origins in physics, the details of which are beyond the scope of this discussion. However, I import this theory for its benefits to inform the current dynamics of DAEP. My objective for advancing a seesaw model is to provide a label and a framework to refer to the different points of equilibrium of, and emphasis on, children’s educational experiences of a DAEP seesaw. There are premises on which the seesaw model pivots:

1. That the teacher is the agent of implementing the socially derived educational content in a process deemed appropriate for child development.
2. That when teachers let children focus on child-centred activities (read content/concerns for child developmental needs) at the preschool, children might not be equipped with the academic skills necessary for their later functioning at school.
3. That teacher-directed activity (read socially/politically driven content/concerns) at the preschool equips children with social and emotional skills for later functioning in life’s contexts.
4. That the emphasis that preschool child’s educational experiences take depends on varying stakeholder perspectives and expectations for preschools.
5. That children’s educational and developmental needs attain equilibrium (emphasis) when various stakeholder needs/perspectives overlap with children’s developmental needs in DAEP.
6. That there is a point of equilibrium (read emphasis) upon which a balance exists between children’s developmental needs and their acquisition of academic skill.

Figure 50 (below) illustrates all the above assumptions in a summary of three varying levels of emphasis: child-centred activities, teacher-directed activities and a balance between child-centred and teacher-directed activities, which also balances the seesaw at the centre.
The seesaw has two extreme points, at the right and left ends equidistant to each other, from the central point. The central part is the pivotal point on which the seesaw (children’s educational experiences) attains its perfect balance. Therefore, for it to balance, the weight (emphasis between academic skills and children’s holistic development through their preschool educational practices in our case) at each end needs to be of an equal significance. In the model, when emphasis tips towards either left or right, it leads to imbalance or a state of disequilibrium. Figure 51 (below) illustrates the different states of equilibrium for understanding preschool teacher’s beliefs of children’s developmentally appropriate educational practices.

**Figure 50:** Teacher-centred and child-centred relations on a seesaw

**Figure 51:** Different levels of equilibrium/disequilibrium in the Seesaw model between child-centred and teacher-directed activities
At level one, there is a balance between child-centred and teacher-directed activities. At level two and three, there is a state of disequilibrium between child-directed and teacher-centred activities, because of emphasis on either of the components. As will be illustrated at the practical level of how the seesaw model might be applicable to the dynamics of DAEP, these levels will vary accordingly. Approximating DAEP is the ideal. However, in real life, unlike reference to perfect balance attained through matter in the physics seesaw theory, the seesaw model of preschool DAEP might not attain, but can only approximate the perfect balance due to human dynamics involved. Therefore, I am proposing some level of imbalance as necessary, as may be in any situation, depending on the social dynamics in context.

Following discussion of the four components of children’s educational experiences, I seek to advance a seesaw model that balances the four components. These are the child’s developmental needs (attained by including principles of child development), teacher decisions, the school demands (to empower the teacher and the school as the school administration as custodians of accountable process of learning), the social demands and political needs (parents and political as agents of the implementation of the education policy).

These forces are requisite to a more realistic DAEP approach. In the absence of a balance, any of the components are likely to suffer. For example, a focus on the school culture, together with the social demands and child needs, leads to absence of the teacher in the education of experiences of the child. Teacher decisions, social demands and the child demands lead to a lessening of the school’s role in children’s educational experiences, and yet it is the society’s custodian for implementing the education agenda. A focus on teachers, school culture and children’s needs leads to a DAEP framework that the wider community desires. However, it disregards parents’ concerns for their children’s developmental needs, with parents being the intermediate appraisers of the child’s development, as they also bear long-term consequences of mistakes in the education. Smidt affirms the need to involve parents:

You can be left in little doubt that it is generally considered to be ‘a good thing’ for parents and carers to be immediately involved with schools and settings which care for and educate their children (2007:168).
Katz (1995) adds that the challenge of implementing ‘appropriate’ pedagogy is to align parents understanding, expectations and preferences with appropriate pedagogy. Therefore, in line with community empowerment for preschool education parents ought to be involved with the care and education of their children (Katz, 1995:115; Smidt, 2007: 168). This can be done at two levels; namely at a policy and practical level. At the former, parents or their representatives need to have a say on what their children learn at school in developing the curriculum. At the latter level, the content of the curriculum should be agreeable to all stakeholders for a DAEP framework that works. Once there is a curriculum framework, external forces that teachers face ought to be minimal.

However, Smidt (2007:172-3) acknowledges that it is problematic to involve parents in situations where their roles or reasons for their parental involvement are unclear. A negative childcare attitude towards parents hinders nurturing a working relationship with them. Consequently, derived from the above components necessary for the developments of a workable DAEP, I propose three models of a seesaw that embrace various levels of emphasis, in line with stakeholder consensus. The explanations of the different levels of equilibration follow.

**7.4.4 DIFFERENT LEVELS OF EQUILIBRIUM**

There emerges from teachers’ beliefs, children’s educational experiences and the factors that influence their beliefs, a relationship that fits into a seesaw model. From my study, the seesaw model oscillates between the teachers putting emphasis on worksheet-based tasks for the children in practice and, conceptually, other research findings. Teachers’ beliefs indicate an emphasis on a child-centred approach to teaching.

Why do I frame it as a seesaw?

- Teachers think DAP but act in a contrary way
- Theoretical literature suggests DAP but empirical research suggests the contrary. Literature on DAP has mixed findings of DAP thinking-DIP acting.
- There is a need to provide a balance between academic subjects and playful learning. This is the new dispensation that not only allows children to develop as children, but which also prepares them for future school success through deliberate steps to blend skills and play (Stipek, 2007).
7.4.5 RELATING THE SEESAW MODEL TO DAP

An equilibrated view of developmentally appropriate practices suggests an approximate balance between the methods through which children learn best, a child-friendly learning atmosphere, and the involvement of parents in their children’s learning. The implication is that learning opportunities for children should consider both activity-based learning, as well as parents’ aspiration for their children’s education in a culturally sensitive environment. In addition, the identified country priorities (as defined by policy frameworks), should be included. I suggest that teachers’ concerns, as the primary stakeholders, ought to form part of the DAP principles.

As mentioned, DAP itself is a contestable, even a difficult concept to grasp, given its lack of specific processes through which to attain appropriate method and content (Grisham-Brown et al., 2005:21). Thus, a universally acceptable DAP would be difficult to attain. Consequently, due to varying social needs and focus of education in different contexts, in addition to stakeholder variability, without a framework to interpret and formulate what is DAP, a disjuncture arises between the destination (DAP) and the means to attain content. Moreover, there is lack of precise methods of teaching standards (Wien, in Goldstein, 2007b:380). In addition, as mentioned, what is missing in DAP is the actual educational component of what three-to-five-year-old children ought to learn, except for the largely ambiguous and relative expectations for school readiness.

Therefore, as part of an attempt to clarify context variables in the application of the DAP framework; I propose various dynamics of the seesaw which includes an explicit mention of the educational component, hence DAEP, as will be illustrated in the following sub-sections. These levels are: the teacher-centred positive-negative model (TC-PNM-DAEP), the child-centred positive-negative model (CC-PNM-DAEP), and the teacher-child centred positive-positive model (TC-CC-PPM-DAEP). The first two models are negative while the last one approximates a positive model. The detailed explanation of the seesaw models follow.

7.4.6 TEACHER-CENTRED-POSITIVE-NEGATIVE-DAEP MODEL (TC-PNM-DAEP)

In this model, I propose a seesaw model whereby the learning tasks are teacher centred, where the teacher puts emphasis on worksheet-based tasks. In this model, as in my study,
the child is succeeding at completing the learning tasks proficiently, through memorization and perhaps rote-learning. Stipek (2004:563) found that children from low income families benefited from direct instruction, while Stipek et al. (1995:220) conclude that letter and word recognition is effectively taught through teacher-directed approaches. However, a teacher-centred approach which also emphasizes structured worksheet-based lessons (Bagdi, 2004:203; Frost, 2003:30; Kluger & Park, 2001:50; Miller, 2005:257; Nutbrown, 2002:1-3; Palmer, 2005:26 & Wesley & Buysse, 2003:351) in addition to testing (Burke & Burke, 2005:282; Morrison, 2006:78) and long hours of centre-based care, increases aggressive behaviour and disobedience among children (Belsky, 2006:103-4; NICHD, 2003:998). In addition, according to research, academic focused learning produce transient and short-term academic gains (Monighan-Nourot, 2005:25) that may not be stable over time (Goodman & Sianesi, 2005:534). Apart from surface learning, academic emphasis could also lead to later socio-emotional problems, as teachers give little attention to children’s social and emotional needs (Kostelnik et al., 2004:41). Teacher-directed approaches compromise the child’s creative development (Zeng & Zeng, 2005:712) as well as their personal efficacy, competence, and pride in accomplishments (Stipek et al., 1995:220).

Evidently, there is need for teacher-directed learning, as some types of knowledge, such as facts, concepts, ideas, vocabulary and stories are taught through direct instruction (Stipek et al., 1995:220), while children acquire dispositions and feelings that encompass different levels of sociability and emotional responses through interactions (Katz 1995:102-3; Kieff & Casbergue, 2000:42-43). From these research-based arguments, the model in which the teacher predominantly directs learning has immediate benefits, which turn out negatively in the course of children’s later development. That is why I refer to it as a teacher-centred positive negative model of the seesaw (TC-PNM-DAEP). It appears positive in the early stages of development, especially as relates academic success, but children do not direct their own learning, and there is limited knowledge transfer to other situations (Stipek, 2004:563; Zeng & Zeng, 2005:712). Children in didactic environments experience social and emotionally-related problems, such as anxiety, quilt, inferiority and helplessness (Elkind, in Zeng & Zeng, 2005:708).

Therefore, in the teacher-centred positive negative model (TC-PNM-DAEP) of the seesaw, the emphasis on task-based assignments tips the scale towards the teacher’s and
society’s side, at the expense of play-based activities. Therefore, in the literal sense of weights of a scale, the teacher has more weight (authority) to decide the learning tasks for the children. Moreover, in this model, more task-based worksheets are given to the child. In the interim, the child succeeds in completing the tasks, and this gives satisfaction to both the parents and the teachers. This satisfies the social demands of the education system at the expense of the child’s needs for optimal growth and development.

However, in order to balance the social demands and the child’s needs, I propose the downscaling of teacher-directed learning which places emphasis on the social or economic demands of preschool education at the expense of the child’s holistic development. In the process of downscaling, I introduce in to the seesaw what I consider as the moderating activities. As there is less weight (read emphasis) on the teacher-directed processes, in a downscaling process, using the moderating activities of increasing child-centred learning activities, the seesaw gets more weight on the side of the child, hence encouraging an holistic approach to child development that embraces both academic and socio-emotional needs through child-centred activities, in an upscaling process. Figure 52 (below) summarizes the TC-PNM-DAEP.

**FIGURE 52: Teacher-Centred Positive-Negative Model of DAEP (TC-PNM-DAEP)**

7.4.7 **CHILD-CENTRED POSITIVE-NEGATIVE -DAEP MODEL**

The concern about a child-centred approach in early learning is that play lacks purpose because of aimless playful activities and lack of accountability for children’s
development. Smidt (2007:64) warns: “The issue of play as a mode or way of learning is something anyone involved in learning of young children needs to read about think about and come to understand”. Stipek (2007:741) calls upon ‘good’ teachers to embed the children’s learning experiences in play.

In the CC-PNM-DAEP model, it is a child-centred Positive-Negative model of DAEP (the child seems to be succeeding but negative effects could arise later due to inadequate preparation for learning tasks). The negativity of the model arises from too much play or child-centred activities at the expense of the child’s need to learn and be equipped with appropriate academic content for the future school success. In this model of the seesaw, in the literal sense of weight and authority, the society demands and emphasizes on the child’s need to play as part of the growth process. The negativity of this model is the result of an inadequacy to prepare the child to undertake learning tasks necessary for present and future learning. This arises when society underrates the children’s ability for worksheet-based learning. In order to moderate the weights of the child-centred Positive-Negative model of DAEP (CC-PNM-DAEP), I propose that the child-centred activities reduce in a downscaling process, which allows teacher-directed activities to upscale through the introduction of worksheet-based tasks, with the aim of preparing the child to fit in to future demands of the school system.

The teacher is central to the moderating process in implementing the moderating activities, as much as parents and other stakeholders are, in acknowledging and supporting the need for such tasks. The objective is to approximate a balance between task and worksheet-based learning and child-centred play-based learning. Figure 53 (below) summarizes the child-centred Positive-Negative model of DAP (CC-PNM-DAEP).
7.4.8 TEACHER-CENTRED, CHILD-CENTRED POSITIVE-POSITIVE DAEP MODEL

A combined balance between teacher-centred and child-centred positive-positive model (TC-CC-PPM-DAEP) requires an upscaling and downscaling process at the same time. In societies where there is much emphasis of the teacher-centred and child-centred positive-positive model of (TC-CC-PPM-DAEP), learning leads to a teacher-centred positive-negative model (TC-PNM-DAEP). In such societies, there is need to downscale academic tasks, while societies that demand a type of learning, leading to a child-centred positive negative model (CC-PNM-DAEP) need to downscale play-based learning, to prepare children for future tasks, as well as to develop in them a school success-oriented ethic. Figure 54 (below) illustrates a near-perfect balance between teacher-directed and child-centred activities TC-CC-PPM-DAEP, which might lead to balanced child development through learning.
In the teacher-centred, positive-negative model (TC-PNM-DAEP), downscaling worksheets accommodate time to upscale child-centred activities, by introducing more play-based learning. In the child-centred positive-negative model (CC-PNM-DAEP), upscaled worksheets downscale child-centred play, hence leaving more time for the child to complete measured tasks as a prerequisite to future success of learning tasks. If the teacher can attain such a balanced seesaw, then one can talk of DAEP. However, this is only possible at a theoretical level, whose feasibility depends on the social demands of an education system. But since most societies need functional children who develop effectively, this seesaw model might offer guiding principles of ensuring the success of children’s future learning.

**7.4.9 A CONCLUSION ABOUT THE SEESAW MODEL**

In advancing the seesaw model of DAEP, the aim is to offer critical bases upon which early childhood programmes can approximate DAEP, without much contestation that arises from social and political agenda of preschool contexts. Through the DAEP seesaw model, each social system can upscale or downscale its components to provide a consensual approach, as to what stakeholders consider as their own definition of DAEP. In this way, the seesaw model aims at embracing multiple realities for which DAEP might have been initially criticized (Kostelnik *et al.*, 2004:25).
A brief sojourn after voyage seven

In this voyage, I have taken you how the teachers navigated the terrain of the 12 principles of DAP that were applicable to the study.

As we travelled along with them, they identified the territory of most of the twelve principles, although the map showing some principles observed in children's educational experiences were more prominent.

As we traversed the literature territory, I demonstrated how data fits into the lens of the different levels of the bioecological systems theory.

Towards the end of this voyage, I loop back our journey's experiences with others gone before us to demonstrate how the teachers experiences, as interpreted from the social context, fit into a seesaw model.

This model helps us to navigate other terrains, beyond the research context using the DAP framework. The following voyage concludes the study based on the research questions guiding the study, as it also makes recommendations for further research.
As I come to the sunset of this academic voyage,

I reflect back on the summary of what we saw and heard in the entire journey.

Besides, as we reflect on what we saw, it is worthwhile to note how this journey has contributed in some small way to the practice of early childhood education in Kenya.

I also look back at the possible worth of this voyage to provide a link to the future of other possible journeys that might result from my voyage.
8.1 OVERVIEW

This voyage presents the summary and conclusions of the findings of the study. A section on the recommendations for preschool education in Kenya and for further research follows. A restatement of the questions guiding the study and summary tables of the findings follows:

8.2 THE PURPOSE OF THE STUDY RESTATED

The purpose of my research was to explore how preschool teachers’ practical experiences frame their beliefs, understanding and interpretation of developmentally appropriate educational practices along five constructs, namely: teaching strategy, use of materials, scheduling, assessment, and consideration for children’s individual differences. Further, the study sought to explore how such an interpretation expressed itself in teachers’ interaction with children against what I call highly ‘academised’ expectations of preschools in Kenya. This could enhance our understanding of the factors underlying preschool teachers’ decisions within a DAP framework as they interact with children. In addition, it could provide insight to the current role that the preschool environment plays in the child’s daily interactions and educational experiences.

8.3 RESEARCH QUESTIONS RE-STATED

The research question was framed as:

How do preschool teachers’ practical experiences frame their beliefs, understanding, and interpretation of developmentally appropriate educational practices?

To address this question, I posed four sub-questions:

1. How do preschool teachers interpret developmentally appropriate educational practices?
2. How do preschool teachers’ interpretations of developmentally appropriate practices express in their interaction with children?
3. What are the beliefs influencing teacher perception and interpretation of developmentally appropriate practices?
4. What are some of the factors influencing such beliefs?
8.4 OVERVIEW OF RESULTS

This section summarises the results of the study, and is organised according to the five constructs that served as the framework of analysis of DAEP. These were: the teaching strategy, use and silence of materials, scheduling, children’s assessment and teachers’ consideration for children’s individuality. A summary of each of these follows.

8.4.1 TEACHING STRATEGY

This study established that although teachers’ expressed child-centred beliefs, they spent most of their time with children doing task-based assignments that used a subject-based, teacher-directed approach. Within this structure, teachers limited the duration of children’s learning activities. A child-centred approach focusing on the use of materials was lacking in all the three classes, except in the DICECE four-year-old class. The teachers’ concerns resulted from the need to prepare the children to fit with the demands of transition to the primary school whose curriculum they perceived as difficult. However, their immediate concern was to facilitate the children’s preparation to pass the standard one interview.

Figure 55 (below) summarises the teaching approach and children’s educational experiences.

![Figure 55: A summary of teachers’ interpretation and expression of DAEP](image-url)

**Theme one: Teaching strategy**

**Nature of children’s educational experiences**
- Highly structured subject-based approach
- Similar tasks for all children
- Choral reading of charts in literacy environment
- Copying and completing tasks in numeracy activities (number recognition, serialization, addition, subtraction)
- Copying and completing English Language Activities (letters of alphabet, filling-in missing letters, picture-word reading, rhyming words, single sound and double sounds)
- Kiswahili- syllabic reading, picture-word, naming objects, drawing objects, identification
8.4.2 The use and silence of materials

Teachers expressed beliefs that favoured the use of materials, for various reasons such as their usefulness in enhancing physical, social and emotional development, or for making learning enjoyable for the children. Figure 56 (below) is a summary of the teachers’ beliefs that favour the use of materials.

**Figure 56:** A summary of teachers’ beliefs about the use/silence of materials

However, the use of materials was anecdotal in the Montessori baby class, and entirely absent in the DICECE and Montessori top classes. It was only in the DICECE baby class where the children engaged with materials. A further analysis through interviews revealed that teachers held various beliefs that inhibited them from using materials. Such beliefs expressed a perceived conflict between formal learning, requiring extensive formal written tasks, and the use of manipulative materials in non-structured child-centred learning. Teachers expressed urgency in task completion. Figure 57 (below) summarises some of the reasons advanced for the silence of the materials.

**Figure 57:** A summary of teachers’ beliefs about the silence of materials

- **Materials are useful in enhancing:**
  - children’s physical development
  - children’s cognitive development
  - children’s independence and approach to tasks
  - children’s adaptation to learning activities
  - children’s develop positive emotions as they learn

- **Teachers’ sentiments (We do not use materials because...)**
  - Parents’ expectation for formal learning inhibits use
  - Lack of parents’ understanding of Montessori curriculum negates use of materials
  - Materials are many, relative to the time available
  - Need to prepare children to transition to a non-Montessori curriculum
  - Montessori a slow method
  - Less necessary as children learn the value of coming to school
The teachers’ training in different types of curriculum did not alter their approach to children’s educational experiences in either teaching method or content. In spite of the numerous teaching materials available for children in the Montessori class, there was little use or reference to them by teachers dealing with either the baby or top class. Their confirmed haste reflected a belief that the Montessori approach uses elaborate materials that require more time than available in their circumstance. Therefore, both teachers suggested that they put the Montessori materials aside to concentrate on academic content favoured by parents.

8.4.3 BELIEFS ABOUT SCHEDULING OF CHILDREN’S ACTIVITIES

All the teachers in the study were independent to plan and implement their teaching schedules. Teachers used a general as well as a schedule approach to implement the children’s educational experiences. In all the cases except Belinda, the teachers used a subject-based approach without use of materials. In the predominantly written activities, the children with a fast tempo dictated the pace of the task completions. Figure 58 (below) is a summary of the general approach to scheduling used by the teachers in the study.

![Theme three: Scheduling of children's activities](image)

- Sequenced presentation (introduce with example, give task, assess task, end the subject)
- Scheduled subject-content (math, English, Kiswahili)
- Forecast completion (Each approx. 30 mins per subject)
- Scheming and use of Daily Diary for Montessori teachers

**FIGURE 58: A summary of teachers’ beliefs about scheduling of children’s tasks**

8.4.4 BELIEFS ABOUT ASSESSMENT OF CHILDREN’S ACTIVITIES

Teachers in this study believed that assessment of children was necessary to help them plan for children’s learning, and to provide feedback to parents about their children’s progress. Three of the four teachers in the study supported class retention for children who had learning difficulties. Therefore, assessment focused on formal learning tasks
such as whole group choral reading, copying and task completion. Overall, a cognitive emphasis in assessment emerged in the study. Figure 59 below summarises the assessment approach used by the teachers.

**Figure 59: A summary of the teachers’ approach to assessment**

### 8.4.5 Beliefs about children’s individuality

The teachers acknowledged that children expressed individuality in their cognitive abilities, approach to learning, tempo, and differences that arose from their social backgrounds. Consequently, teachers believed that planning for their learning should embrace these individual differences through differentiated tasks. It emerged that teachers in both baby classes gave the children differentiated tasks for completion. However, such differentiation among children in the top classes in both the Montessori and DICECE top classes was lacking, as all children engaged in a similar activity for similar duration of time. This was perhaps explained by the need to prepare the children for the transition interview, since these were the classes soon set to transition to the primary school. Figure 60 (below) illustrates the group rather than individualized approach to tasks.

**Figure 60: Teachers’ approach to children’s individuality**
This study found that there was not necessarily a universal approach to teaching children, but rather a modified approach based on the unique characteristics of particular social demands of the main role of the preschool. For example, despite the study set-up being university-based preschools, and therefore assuming an elite parent clientele, the parents might not have insight about DAP. They still pressurised teachers to engage children with task-based content. In conclusion, the study found that the teachers contextualised the concept of DAP within their own unique experiences. According to each teacher, their unique circumstances (teaching and employment) dictated how they structured children’s educational experiences.

8.5 CONCLUDING REMARKS

This study concludes that teachers held beliefs that favour a DAP template, as reflected in early childhood literature on developmentally appropriate practices. The beliefs that emerged relate to each of the themes in the study. For example, all teachers favoured the use of materials because they help in the overall development of the child, besides making learning interesting. However, for reasons discussed in voyage five, and summarized in section 8.4.2, teachers’ beliefs did not translate into the use of materials among the children. Moreover, the teachers expressed a belief in considering children’s individuality in their learning styles and assessment because of the differences inherent among children. However, in their actual practices, which were in opposition to their beliefs, expressed in whole group teacher-directed, formally structured learning tasks within strict schedules. Assessment also reflected this subject-based approach, mainly focusing on recall, recognition and identification of objects in addition to simple math tasks.

8.6 RECOMMENDATIONS FOR PRESCHOOL EDUCATION IN KENYA

The following are recommendation arising from my study, for preschool education in Kenya:

- There is need for preschools to have field supervisors, just as there are teacher advisory centres in every Divisional Education office for primary school quality control, as part of quality assurance for the preschools. By strengthening
and refocusing attention to the policy of running preschools using the recommended curriculum, teachers’ roles might shift to balance between child-centred learning for the overall development of children and formal educational activities necessary for school transition.

- The establishment of an employment body for preschool teachers might assure them of employment stability, because teachers could be more concerned about keeping their jobs than by teaching at the preschool rather than facilitating child exploration and development.

- Although there has been piecemeal implementation of the Koech Education Commission of 2000, about some of the areas that require reinforcement of quality, there is an urgent need to attach each preschool to a primary school such that admission into the primary school is compulsory. This might ensure automatic admission for all children who transition from the preschool to the primary school, without admission through an interview. Although there will always be more preschools than primary schools, this might foster interaction between preschool teachers and their primary school colleagues, where they can share ideas about areas to emphasize at preschool.

- A more unified and supervised implementation of the early childhood curriculum might ensure that preschool teachers use the recommended syllabus in a more developmentally and culturally responsive way.

- The Ministry of Education might mandate field officers to supervise preschool curriculum implementation to ensure that learners are not confronted with academic-oriented tasks. Rather than use the current standards guideline (NACECE, 1999), which only outlines expected skills index for different age groups, the curriculum can be truncated into the nine terms of the preschool education duration with specific content coverage for each term to facilitate concise planning and content coverage by the preschool teachers.

- There is a need to assess the training of preschool teachers to ensure that only credible institutions offer early childhood education. Moreover, a uniform curriculum for preschool training that facilitate parity in preschool provision might ensure that some teachers do not seem more qualified than others do.

- There might be need to revise the entire primary school curriculum to reduce the number and scope of coverage of subjects offered that stakeholders do not feel
the need to prepare the children early to fit into the current highly competitive school demands.

- The development parent-school relationships might enhance communication and assessment of values for preschool education and care. With such links, parents can benefit from a needs assessment based education that addresses the challenges posed when they do not understand particular teaching philosophies.
- In order to harmonize shared expectations between preschool and primary schools workshops can be held where stakeholders can have a common platform to discuss concerns and to clarify curriculum issues. This will ensure continuity of curriculum between preschool and preschool education.

8.7 RECOMMENDATIONS FOR FUTURE RESEARCH

This study focused on the preschool teacher’s beliefs of developmentally appropriate educational practices and how this plays out in their interaction with children in their teaching among Montessori and DICECE trained teachers in a University setting in Kenya. This is limited in scope. Consequently, from the experiences of this study, future research could:

1. Focus on teachers trained in other preschool curricula to find out whether the teachers would echo similar sentiments.
2. Endeavour to conduct a study among parents of preschool going-children, taking up the issues raised by the teachers, using maybe for example focus group discussions.
3. Carry out a study to assess the role of private schools in the emphasis for worksheet based learning.
4. Develop the actual moderating activities for different age groups in trying to balance out the preschool seesaw in different cultural set-ups (because education objectives and indeed social values differ in different contexts).
5. Conduct research in a different cultural set-up, using DAP framework, and see how it is different from or similar to the current study.
6. There is need for research that assesses the long-term impact of the children’s engagement in highly structured academic tasks that give little room for play.
7. There is need to explore the views among several stakeholders about the standard one interview and to recommend a possible consensus about the nature and purpose of the interview.

8.8 CONTRIBUTIONS OF THE CURRENT RESEARCH

Regardless of the limitations identified in voyage 3 (refer back to section 3.6), the study contributes to early childhood education research focusing in a developing country context, as part of a holistic perspective to understand different early childhood education contexts other than those of the Western world.

8.8.1 USE OF PHOTO-ELICITATION IN THE CONTEXT

The use of visual (both video and audio) elicitation is yet to be widely embraced in ECE studies, and in the developing world contexts. By using both visuals (photographs and video) concurrently, the study had ‘total’ information captured that was available for later analysis. This way, the researcher did not rely on memory that is sometimes fallible, thus making the information readily available. In addition, there seems to be no study in the developing world context that has utilized photo-elicitation. Visual research is relatively flexible in these contexts where mutual trust appears to underlie the relationship between participants and the researcher. This privilege can provide an advantage to understand early learning contexts in detail, without much mistrust or anxiety.

8.8.2 ACCOUNT OF CHILDREN’S DETAILED EDUCATIONAL EXPERIENCES

This study illustrates details of the nature of children’s educational experiences in two contexts. It has included a substantive amount of children’s actual written and read work as part of the details of children’s learning experiences, which largely lack in other studies. By focusing on particular educational experiences and the actual content of these experiences, it strengthens on previous studies that report either teacher-centred or child-centred approaches. By so doing, it makes a major contribution to understanding how teachers interpret children’s educational experiences, besides showing varying content and processes of children’s educational experiences in the context of the study.
8.8.3 **Holistic Approach to DAP Principles**

This study took a holistic approach to understand how teachers’ beliefs expressed in their interactions with the children. By focusing on themes: teaching strategy, use/silencing of materials, scheduling, assessment and children’s individuality, it provides a holistic overview of the interrelationships among these DAP constructs in a single study. Therefore, it provides a broad understanding of how the teachers’ beliefs about these themes cohere with the holistic picture of DAP. This information is necessary in interpreting how the various facets of DAP are reflected in the teachers’ beliefs and their practices that translate into children’s educational experiences.

8.8.4 **Information on Educational Experiences in Two Preschool Curricula**

Although this study did not seek to make a comparative analysis, it provides information about how experiences of children of variable ages and curriculum philosophies differ or are similar to each other. In addition, the availability of information on both Montessori and eclectically trained teachers provide additional information of how curriculum philosophies might be similar or different from each other. This provides insight to understand teacher practices across age groups and contexts.

8.8.5 **Qualitative DAP Study**

Studies of teachers’ beliefs of developmentally appropriate practices have largely taken a quantitative approach, so this study complements other qualitative studies. In addition, it contributes to knowledge of DAP in a developing country context, where research on teachers’ beliefs of DAP are limited.

8.8.6 **A Seesaw Model as an Alternative to Explain Dynamics of Teachers’ Beliefs and DAP**

By adopting the seesaw theory from physics, the current study has attempted to provide a context-specific interpretation of DAP, which attracts a diverse approach in its interpretation. Therefore, to cater for the relativistic nature of DAP, the seesaw model, as a model malleable to context reality and circumstances, offers a baseline for moderating children’s differences, social context dynamics and values as they relate to children’s education.
8.9 A CONCLUSION TO THE STUDY

This study sought to explore how preschool teachers’ practical experiences frame their beliefs, understanding and interpretation of children’s developmentally appropriate educational practice. Although the DAP framework guides teacher-training and the development of preschool curriculum in many contexts including Kenya, there is little literature from Kenya, or Africa for that matter to provide insight about how the framework has been adapted into these settings. The current dispensation is that to understand childhood and children’s experiences, not only in school or child-care, but also in their lived world, their cultural milieu and values needs to be considered. This view motivated this study, to explore preschool teachers’ beliefs, understanding and interpretation of DAEP in Kenya.

In the study, the educational component, implied in the DAP framework is emphasized to provide a rationale that not only develops children holistically, but which also prepares them to succeed in their academic tasks. Therefore, in this study, the rationale for choosing the DAP framework was motivated by the need to explore how the principles entrenched in this framework have been adapted to other cultural settings, especially the understanding of its educational component, beyond its USA origins. By analysing and interpreting the findings within the DAP and the bioecological systems theory, this study contributes literature that provides insight into the social, cultural, economic and political dynamics of preschool provision in Kenya.

To understand the teacher’s practical experiences, non-participant observations captured through photographs and video was done. By using the visuals captured in each teacher’s class to explore their beliefs, this study located each teacher’s beliefs within their own experiences of children’s educational experiences as well as their understanding of the dynamics that relate to their use of DAP.

The DAP framework emphasizes, through twelve principles, the various ways in which childhood is a unique period, which requires children to develop in all domains; physical, social, emotional and cognitive. Therefore, early childhood learning should emphasize these domains through strategic means, which include active manipulation of learning materials in a blend of both teacher-directed and child-centred approaches.
However, although teachers held beliefs that corroborate the DAP framework, in the observations, it emerged that their practice with children did not match their beliefs. In most instances, teachers engaged children with whole group task-based copying and task-completion activities. Foremost, teachers felt that they needed to prepare children to successfully transition to the primary school through a written interview. Other concerns included their perceived need to provide feedback to parents about their children’s writing and academic abilities, different transition requirements/curriculum, a competitive school environment, colleague influence.

Apparently, the teachers’ interpretation of these activities, which might seem inappropriate according to the DAP principles, are appropriate if they are interpreted within the study context. For example, considering the limited primary school vacancies and the need to prepare children to succeed in the primary school, in addition to provide feedback to parents, among other factors make these practices appropriate in context.

The study concludes that teachers hold beliefs that reflect the developmentally appropriate principles, but their practices, which contrast the principles, are considered as appropriate in the research context.
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ADDENDA

ADDENDUM 1: CONSENT FROM THE TEACHER TO HAVE HER CLASSES OBSERVED

CONSENT FROM THE TEACHER TO HAVE HER CLASSES OBSERVED

University of Pretoria, Pretoria 0002,
Republic of South Africa.
Tel: 012-420-411
http://www.up.ac.za

Dear teacher,

I currently enrolled for PhD studies at the University of Pretoria, Republic of South Africa. I have an interest in "Preschool teachers' beliefs of developmentally appropriate educational practices". I will undertake this study in two stages to accomplish the objectives of my study. The initial stage of the study will require me to observe actual interactions between you and the children. The observation period in your class will cover two weeks of non-consecutive observations. Each such observation will last for a maximum of one and half hours per day.

Concurrent to this study, I will request you to participate in follow-up interviews based on the data collected in your class. This interview will be audio-taped for purposes of analysis. However, you are not obliged to participate in the interviews if you so desire.

The purpose of this letter is to request your consent to allow me to be part of your class to observe and record your classroom activities and for your participation in a follow up interview that I will schedule according to your convenience. I may also need to document some samples of your preparation and teaching materials.

Once again, I wish to assure you that the information I gather in this study is limited to my use for an academic analysis for the purposes of my degree qualification and its related purposes thereof, such as publishing the findings. However, I could make recommendations to the Ministry of Education, especially if what I observe threatens the emotional or physical wellbeing of the child-participants.

I wish to further assure you of anonymity in data presentation if you so wish. Consequently, I also assure you that should you wish to discontinue after the start of the study, you are free to do so.

If you have no objection to my request, kindly sign below in the space provided.

DECLARATION

I declare that I have fully understood the implications of participation and that I am aware of my rights in the research process. I also give my permission for the use of photos and video clips.

NAME OF TEACHER: [signature]
QUALIFICATIONS: [signature] (to be kept Confidential).
PERSONAL CONTACT: [signature] DATE: [signature]

Thank you in advance. Yours Sincerely,

Rose Ruto-Korrir, PhD Student, Cell Department of Educational Psychology, University of Pretoria, Republic of South Africa

Addenda
ADDENDUM 2: LETTER OF CONSENT FROM PARENTS

Dear Parent,

I am enrolled for PhD studies at the University of Pretoria. I have an interest in doing a research on “Preschool teachers’ beliefs of children’s developmentally appropriate educational practices” and how this plays out with their interaction with children in formal learning activities. Part of the data collection process in the study involves observing children in the process of learning interactions at the preschool and the range of activities they engage in. The main objective of the study is to explore how children engage in activity and the reasons advanced by the teachers for their choice of these activities as a way of partly understanding how children spend their day at school.

This study is in two stages. During the first stage, I will do direct observations of the range of activities that children are involved with. Each such observation will last for a maximum of one and half hours per day. I will also take photographs and video clips of the children during my observations. The second stage involves a pre-arranged interview with individual teachers based on the observed classroom activities. Children are not involved at this stage. The study will take only two weeks and will in no way interrupt your child’s learning activities. No harm will be done to the child because I will only observe, photograph and video record the children in activity. However, I wish to request your permission to present the photographs and video clips in my thesis and related presentations.

Your decision to allow your child to participate is voluntary. Even after the start of the study, you are free to withdraw your child from the study. The purpose of this letter is to request you to allow your child to participate in the study and to allow me to use the photographs and video clips of your child to present my research findings. The results of this study are limited to the use for an academic qualification subject to the University of Pretoria’s authority.

I want to thank you in advance. If you accept that your child participates, kindly sign the form below.

DECLARATION
I declare that I have fully understood the implications of child’s participation and that I am aware of my child’s rights in the research process. I also give my permission for the use of my child’s photos and video clips.

Name of parent

Name of child

Signature Date

Thank you once again. Yours Sincerely, Rose Ruto-Korir
(PhD Student, Department of Educational Psychology) Cell Phone: 254 7222.
ADDENDUM 3: REQUEST FOR AUTHORITY TO CARRY OUT FIELD RESEARCH

The permanent secretary,
MINISTRY OF EDUCATION,
P.O. BOX 60209-00200
NAIROBI.

Dear Sir/Madam,

The above subject refers. I am currently enrolled for PhD studies at the University of Pretoria. As part of the qualification for the degree, I have to carry out field research on “Preschool teachers’ beliefs of developmentally appropriate educational practices”.

I have designed my research in two phases. In phase one of the study, I want to assess preschool children’s’ learning engagement experiences in relation to their teacher’s developmentally appropriate beliefs. To accomplish my study objectives, I will do direct observations of the children’s engagement experiences that I will capture on a video recorder for analysis purposes. In phase two of my study, I will do follow-up interviews with the teachers based on the observed activities. The child and teacher participants will only be required to engage in their normal learning activities that the researcher will not interrupt, apart from being physically present to capture data on video. The teacher participants are active discussants in the individual follow-up interviews.

The data captured will depict how preschool teachers and children engage in learning activities and the reasons presented by the teachers for their choice of the learning activities.

I plan to do my study in ___________Division,__________District, between October 2006 and February 2008. The study will not interrupt the regular schedule of the school program.

The purpose of this letter is to seek authority from your office to go ahead with the planned research.

Thank you in advance.

Yours faithfully,

Rose Ruto-Korir,
PhD Student, Department of Educational Psychology, University of Pretoria, RSA.
Cell Phone________________
ADDENDUM 4: CERTIFICATE OF AUTHORITY TO DO THE RESEARCH FROM THE KENYA GOVERNMENT
ADDENDUM 5: INITIAL TOP-DOWN ANALYSIS (THEORETICAL APPROACH)

Developmentally Appropriate Principles

- Holistic child
- Variable rates
- Snowballing
- Predictable direction
- Active learners
- Importance of biological and environmental effects
- Play in learning

- Challenging experiences
- Security of learning environment
- Environment affects development

- Multiplicity of social and cultural contexts of development

Seek instances when a teacher talks of any of the three considerations of during the interview; examples below

- Individual differences (all teachers)- extend of work given
- Variability of writing speed
- Variability of home specific contexts (all teachers)
- Security/teacher - understand child, do not punish (teacher Enid)
- Critical periods of development (teacher Enid and Stella)
- Predictable of direction - child easy to learn sounds, will easily learn letters and words (Teacher Belinda and Enid)
- Stage presentation moves from simple to complex (Teacher Enid)
- Use children’s weekend experiences as part of learning social and language areas (Teacher Lenora)
- Parents compare schools (Belinda, Enid, Stella and Lenora)
- Scheme to own collection (Teacher Lenora)
## ADDENDUM 6: INITIAL DATA ANALYSIS ATTEMPT (Extracts from interview with Enid)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Code</th>
<th>Initial theme</th>
<th>Emerging Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking letters and placing them back as they are written</td>
<td>Letters of alphabet</td>
<td>Content covered showing</td>
<td>Teaching strategy</td>
</tr>
<tr>
<td></td>
<td>(language)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Placing letters back as they are written</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content presented should consider individual difference [EN01: 68, 72]</td>
<td>Consider child's previous performance</td>
<td>Content presented should consider individual difference [EN01: 68, 72]</td>
<td></td>
</tr>
<tr>
<td>Previous performance on specific subject matter should dictate the kind of work given to the child-Knowledge of sounds relates to introduction to letters [EN01: 74, 78]</td>
<td>Slow and quick learners</td>
<td>Nature of child (Tempo)</td>
<td></td>
</tr>
<tr>
<td>Use of a daily diary to plan and focus [147; 150; 152; 154; 156; 158; 160]</td>
<td>Use a daily diary</td>
<td>General Planning</td>
<td>Scheduling</td>
</tr>
<tr>
<td>Use a daily diary</td>
<td>General Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No school timetable in Montessori, but rather the use of daily diary focuses the teacher on the kind of activities to focus on [157, 174]</td>
<td>No time table</td>
<td>Planning</td>
<td>General frameworks</td>
</tr>
<tr>
<td>Content factored into a daily diary</td>
<td></td>
<td></td>
<td>planning</td>
</tr>
<tr>
<td>Content covered may be too much for the children. But the pressure from outside forces them to teach according to the pressure [311]</td>
<td>Too much for the children</td>
<td>Pressure for task-based workbooks</td>
<td>Pressure for task-based learning</td>
</tr>
<tr>
<td>Content coverage considers the interview at the end of the year [311]</td>
<td>Cover interview content</td>
<td>Content considers the interview at the end of the year [311]</td>
<td>Pressure for task-based learning</td>
</tr>
</tbody>
</table>
### ADDENDUM 7: IN VIVO CODES (extracts from interview with Lenora)

<table>
<thead>
<tr>
<th>In vivo</th>
<th>Theme</th>
<th>Verbatim</th>
<th>Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two methods teacher-centered Child-centered</td>
<td>Teaching strategy</td>
<td>LE: You say the method now for example you know they are (2) two methods; Teacher centered method and child-centered method [LE02:14].</td>
<td>14</td>
</tr>
<tr>
<td>Use mostly, child-centered</td>
<td>Teaching strategy</td>
<td>LE: So I use mostly child-centered method.</td>
<td>16</td>
</tr>
<tr>
<td>Picture, letters Flash cards Most of the time Reach to one another Playing with flash cards I supervise Teacher-centered</td>
<td>Content Content/approach Method Peer support Children play Teacher role inappropriate</td>
<td>LE: I introduce the child to the letter and the picture while that I give them flash cards of pictures and letters so most of the time when the child starts the day, class they will be playing with those cards they will be reaching to one another that is where I will supervise and see what they are doing I assist them most of the time yeah most of the time I take time to supervise them, because if I use the teacher centered method is the way I will take most of my time that is not recommended in pre-school [LEO2:18]</td>
<td>18</td>
</tr>
<tr>
<td>Know/catch up with school</td>
<td>Assessment</td>
<td>LE: And you will know where that child or is getting or catching up in school. Yah [LE02: 22].</td>
<td>22</td>
</tr>
<tr>
<td>Senior class Child cannot copy/Or change</td>
<td>Copying/task completion</td>
<td>LE: Even in senior class you can find a child who cannot copy or change</td>
<td></td>
</tr>
<tr>
<td>Forced to write to the child Re-explain</td>
<td>Individual differences/learning needs/more attention /Bring children at par</td>
<td>LE: That time is forced to write to that child class first when the rest are and I go around re-explaining to those who are slow [LE02:314].</td>
<td>314</td>
</tr>
<tr>
<td>Try to assist Individual attention</td>
<td></td>
<td>LE: Trying to assist</td>
<td></td>
</tr>
<tr>
<td>Nobody forces me/Feel I should</td>
<td>Self-imposed approach</td>
<td>LE: No yaani [that is] I feel I should nobody is forcing me</td>
<td>320</td>
</tr>
<tr>
<td>A must Go there Find work Make sure Today, tomorrow</td>
<td>Interview/content Adequate preparation, if she does not give the work, the child will be tested on the tasks Emphasis on repetition</td>
<td>LE: It is a must when they go there he or she will go and find the work will be there in the interview. I will make sure this child today, tomorrow, if that child is not fast learner</td>
<td></td>
</tr>
<tr>
<td>I explain today, tomorrow If finds same work</td>
<td></td>
<td>LE: I explain today and tomorrow and the day after that then if the child goes and finds the same work</td>
<td></td>
</tr>
</tbody>
</table>
### ADDENDUM 8: MORE ANALYSIS (THEMES BEGIN TO EMERGE: INTERVIEW EXTRACT WITH TEACHER LENORA)

<table>
<thead>
<tr>
<th>In-vivo codes</th>
<th>Abstraction</th>
<th>Verbatim transcript</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preschool curriculum</td>
<td>Reference to requirements of preschool curriculum</td>
<td>LE: Yah in our in the preschool curriculum</td>
<td>In this extract the teacher is talking about Pressure to teach beyond the preschool curriculum</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>R: Yes</td>
<td></td>
</tr>
<tr>
<td>3. Not advised Teacher sentences</td>
<td>Specific on what teachers ought to teacher</td>
<td>LE: We are not advised to teach these children to the extent of learning the sentences</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>R: Okay</td>
<td>Pressure/interview</td>
</tr>
<tr>
<td>5. [do it now] time we are in</td>
<td>Circumstances for/pressure</td>
<td>LE: I told you it is just the because of the time that we are in</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td>R: Yes</td>
<td></td>
</tr>
<tr>
<td>7. Standard one interview</td>
<td>Prepare children for interview</td>
<td>LE: Because of the interviews for the standard one</td>
<td></td>
</tr>
<tr>
<td>8. Sentence and difficult words</td>
<td></td>
<td>LE: So (pause) like the (pause) sentences and those difficult words</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td>R: Yes</td>
<td></td>
</tr>
<tr>
<td>10. Action word Come, coming Go, going etc</td>
<td>Teaching them what they should be taught in primary</td>
<td>LE: Like the action words and many others (pause) we collect them</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td>R: What are those difficult words?</td>
<td>Doing standard one work</td>
</tr>
<tr>
<td>12. Senior/top class now</td>
<td></td>
<td>LE: You see, Eh in senior class now</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td></td>
<td>R: Yes</td>
<td></td>
</tr>
<tr>
<td>14. Taught in primary schools</td>
<td></td>
<td>LE: You see some of the work I find eh are being taught in primary school</td>
<td></td>
</tr>
</tbody>
</table>
ADDENDUM 9: SAMPLE OF CHORAL ACTIVITY FROM MONMID CLASS

<table>
<thead>
<tr>
<th>Activity</th>
<th>Main activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context</td>
<td>The children have sat in one row facing the black board. They are about to begin their lesson which is led by any child who volunteers to sit at the front to lead others in colour identification. The wooden box holds a set of wooden pellets of different colours or letters or numbers. The lead child is to identify the colour and shout aloud as the rest of the children respond after. One child has sat at the front with the box of wooden coloured pellets, while another child stands near the chalkboard with a rod – also ready to lead the others in the activity of reading lower-case letters of the alphabet. The teacher asks the child to put the rod aside and to join the rest of the children to be led by the child already at the front with the box of assorted coloured wooden pellets.</td>
</tr>
</tbody>
</table>

**Choral reading through modelling**

Child: Letter yellow (showing the other children a yellow plate).

Other children: Letter yellow.

Teacher: *Nani buyo basomi* (who is that not reading?) – An interruption to what is going on [usually when the class response is not as loud].

Lead child: Colour Blue (showing the blue plate)

Other children: Colour blue

Lead Child: Colour white (without any plate)

Other children: Colour white

Lead Child: Colour Black

[Teacher interrupts the child at the front].

Teacher: Nancy*, *weka hiyo rod, itaumiza wewe* [Nancy*, can you keep away that rod, it will hurt you].

Nancy* places the rod at the corner of front left side of the chalkboard. Meanwhile the other child is busy showing (identifying the colours). She has finished removing the colours from the main box onto her lap. She turns the box upside down, uses her right hand to tap the bottom of the wooden case and then places back the wooden chips one by one, carefully arranging them-at her pace. Nancy* goes back to her seat.

The girl takes the box of wooden pellets and her chair to sit at the front to lead others.

Lead Child: Colour white

Other children: Colour white (interrupted by the teacher)- Ian, can you sit down?

Lead Child: Colour red

Other children: Colour Red

Lead Child: Colour Blue

Other children: Colour blue

Lead Child: Colour yellow

Other children: Colour yellow

One child: Colour yee loow (one child says after the others)

Teacher: Interrupts – colour yellow, *siyo* [not] colour yelloow; Colour yellow

Lead Child: Colour yellow

Other children: Colour red [Colour red; then colour black]
Lead Child: Colour brown
Other children: Colour brown
Teacher: Interrupted – Hey, who is that? Nani hasomi – Hey, who is that who is not reading?
Lead Child: Colour blue
Other children: Colour blue
Lead Child: Colour white
Colour white
Colour black
[This child finished leading others, turns the box upside down, taps using her right hand to indicate that it’s empty {perhaps also their own agreed approach to ensure that some letters do not remain in the box}].
Another child rushes to the front, waits to lead others in the activity – prompts the girl who just led to say –
Lead Child: Sijamaliza! (I am not through yet!).
[So firmly that the other child walks back]
Lead Child: Sijamaliza kupanga (I have not finished arranging back – referring to the plates); [the children have a high sense of responsibility in putting back the learning materials. Two more children make an attempt to rush to the front to help – but the girl is yet to finish putting back the wooden plates.
Sijamaliza – pointing to a child at her left. (I am not through yet!) Sijamaliza (I am not through!). Child who had shown interest sits back.
Before the girl is through, two more children have gone to the front to want to take up the activity. Prompts the girl again to retort –“teacher, Milka* anakuja kama sijamaliza kupanga – (Teacher, Milka* has come to me before I am through with arranging- even as the two children are standing by her side) - Interruption by the teacher!
Teacher: Hujamaliza kufanya nini? (You have not finished doing what?)
She finishes putting back the wooden chips – rushes as four children rush together to want to take over the activity.
[Seemingly, she has a preferred one child to succeed her. As she picks her chair, she hands over the box of wooden plates to another child telling her “Kuja, Kuja (come, come)!]
[A girl, with her chair, moves to the front and picks the box from the previous lead child].
Before one child begins, two other children want to snatch the box from her. She succeeds in deterring them. The other three children go back to their seats, dejected…

Lead Child: Nitakupesa? (I will give you).
Colours!

Nuanced:
[I sense that the children like this activity and are very enthusiastic to participate in leading others. The girl who has just taken over gladly takes the place and promises one of the unsuccessful children that she will follow on the queue after she is through leading others.]
### ADDENDUM 10: SUMMARY OF DESCRIPTOR CODES GUIDING THEME GENERATION AND ANALYSIS

<table>
<thead>
<tr>
<th>Category</th>
<th>Theme</th>
<th>Code descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Coding scheme for teaching strategy</td>
<td>Theme</td>
<td>Code/theme descriptors</td>
</tr>
<tr>
<td></td>
<td>Choral reading</td>
<td>The children read aloud, picture words, letters of the alphabet, counting numbers</td>
</tr>
<tr>
<td></td>
<td>Telling</td>
<td>The teacher gives the children instructions on what to do</td>
</tr>
<tr>
<td></td>
<td>Reading</td>
<td>The teacher reads a story, poem to the children</td>
</tr>
<tr>
<td></td>
<td>Demonstration</td>
<td>The teacher shows the children how to complete a written task, or asks another child to show how it is done</td>
</tr>
<tr>
<td></td>
<td>Writing</td>
<td>The teacher writes something on the chalkboard/children do complete task with right or wrong concepts</td>
</tr>
<tr>
<td></td>
<td>Written –task-based assignment</td>
<td>the teacher gives children a specific written task to complete-often with a right or wrong answer</td>
</tr>
<tr>
<td>2. Category Coding scheme for use/silence of materials</td>
<td>Theme</td>
<td>Code descriptors</td>
</tr>
<tr>
<td></td>
<td>Used to introduce concepts</td>
<td>Teacher talks about how she uses materials in her class</td>
</tr>
<tr>
<td></td>
<td>Develop physical and social aspects of the child</td>
<td>Teacher talks about when she actually uses materials</td>
</tr>
<tr>
<td></td>
<td>Enhance creativity</td>
<td>Teacher talks about the some characteristics of the materials</td>
</tr>
<tr>
<td></td>
<td>Used when children are bored -stimulus variation</td>
<td>Teachers talks about how use of materials might slow down the learning process</td>
</tr>
<tr>
<td></td>
<td>Should be familiar to the children /cultural sensitivity</td>
<td>Teacher talks about eliminating content not assessed at the interview</td>
</tr>
<tr>
<td></td>
<td>Slows down the learning process</td>
<td>Teacher mentions haste in using some materials</td>
</tr>
<tr>
<td></td>
<td>We do not do real Montessori</td>
<td>Talks about how they do not use the Montessori Method fully</td>
</tr>
<tr>
<td></td>
<td>Not assessed at the interview</td>
<td>Teacher refers to eliminating content not assessed at the interview</td>
</tr>
<tr>
<td></td>
<td>Use those that are quick</td>
<td>Teacher mentions haste in using some materials</td>
</tr>
<tr>
<td>3-Coding scheme for ‘scheduling”</td>
<td>Theme</td>
<td>Indicators</td>
</tr>
<tr>
<td></td>
<td>Use of daily diary</td>
<td>Teacher’s reference to her adherence to a daily time organization schedule</td>
</tr>
<tr>
<td></td>
<td>Subject organized task</td>
<td>Teacher gives children subject–content structured work</td>
</tr>
<tr>
<td></td>
<td>Duration structured</td>
<td>Teacher talks/indicates time-framed structure</td>
</tr>
<tr>
<td></td>
<td>Children’s activity level</td>
<td>Teacher talks about how she organizes her work to capture children's activity levels</td>
</tr>
<tr>
<td>Coding scheme for assessment</td>
<td>Theme</td>
<td>Descriptor</td>
</tr>
<tr>
<td></td>
<td>Choral reading</td>
<td>Teacher uses choral reading to assess</td>
</tr>
<tr>
<td>Category</td>
<td>Theme</td>
<td>Code descriptor</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>attainment of concepts</td>
<td></td>
</tr>
<tr>
<td>Doing Homework</td>
<td>Teacher talks about children’s homework</td>
<td></td>
</tr>
<tr>
<td>Written tasks</td>
<td>Teacher gives the children a written task to complete</td>
<td></td>
</tr>
<tr>
<td>Mark all written work</td>
<td>Teacher marks children’s written</td>
<td></td>
</tr>
<tr>
<td>4. Coding scheme for children’s individuality</td>
<td>Current academic achievement</td>
<td>Academic abilities considered in presenting work</td>
</tr>
<tr>
<td></td>
<td>Social background</td>
<td>Refers to the home and social factors influencing individuality</td>
</tr>
<tr>
<td></td>
<td>Completion of scheduled tasks</td>
<td>The teacher gives children specific tasks to complete</td>
</tr>
<tr>
<td></td>
<td>Previous performance</td>
<td>Previous academic performance is reference for present tasks</td>
</tr>
<tr>
<td></td>
<td>Task completion speed</td>
<td>child’s working tempo used to give work to the child</td>
</tr>
<tr>
<td>Factors influencing beliefs</td>
<td>Themes</td>
<td>Verbatim quotes</td>
</tr>
<tr>
<td></td>
<td>Interviews</td>
<td>‘We have to take care of the interview’</td>
</tr>
<tr>
<td></td>
<td>Pressure from parents</td>
<td>‘They are concerned, will my child make it’</td>
</tr>
<tr>
<td></td>
<td>Different curricula/requirements</td>
<td>‘You see, this is Montessori, going to a different school’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘these days, we teach beyond’</td>
</tr>
<tr>
<td></td>
<td>Competitive school environment</td>
<td>‘the competition is too high’</td>
</tr>
<tr>
<td></td>
<td>Influence from colleagues</td>
<td>‘if the other teacher is using this writing over’</td>
</tr>
<tr>
<td></td>
<td>Lack of time</td>
<td>‘If I use all materials, time will be over’</td>
</tr>
<tr>
<td></td>
<td>Perceived employment consequences</td>
<td>‘I might even lose my job’</td>
</tr>
</tbody>
</table>

### ADDENDUM 11: A GENERAL SUMMARY OF THE NATURE OF CHILDREN’S EDUCATIONAL EXPERIENCE

**Practical experience/activities**

Belinda’s Class: Apart from engaging in other learning opportunities such as choral reading, copying and task completion, the children engaged with *free play every day* although Belinda still felt the pressure for an academic curriculum— the observations on the right illustrated the details of her lessons

| Day 1: Rhyming, choral reading of letters of alphabet and colors, free play, rhyming numbers, outdoor free play. |
| Day 2: Free play, copying numbers, free play-bottle tops, free play-(play dough) |
| Day 3: Free play(Margarine, ‘Omo’ waste tubs); choral reading; invites individual children ‘show me girl’ from among pictures on the BB; writing on slates |
| Day 4: choral reading; group object identification; choral reading; ‘show me –different parts of the body’; rhyming; singing numbers; arithmetic object addition using boxes; Free play |
| Day 5: Free play; poems and rhymes; drawing pictures. |
| Day 6: Free play; choral identification of days of the week. |
Lenora’s class: The children never engaged with materials that they could manipulate despite presence of these in a display cupboard in the classroom. No free play opportunity, except choral reading that the teacher referred to as a child-centered approach. Children engaged with choral reading, task-completion and copying as illustrated by the observed lessons on the right.

Stella’s class: children engaged in task-based teacher directed activities for most of the time. Except when children with a fast tempo finished their work earlier than the rest, they engaged in choral reading. There were only three brief teacher-directed instances for group-based demonstration; ‘threading beads’ classifying pictures and identifying the provinces of Kenya on a wooden board with cut-out designs of the provinces. Montessori materials remained neatly arranged in the shelves. No free play individual opportunity was provided as indicated by the structure of the lessons observed.

Enid’s class: the children engaged in teacher-directed copying, task-completion and choral reading except free choice choral reading that children with a fast tempo engaged upon completing the tasks ahead of others (like Stella’s class); see the illustrations of the observations.

Use of materials (conceptual level)

All the teachers in the study endorsed the use of materials at the preschool level is important because it benefits children’s cognitive, social, emotional and physical development despite the reality that materials remained silent in three of four classes.

Addenda
ADDENDUM 12: THEMATIC PHOTOGRAPHS-CHORAL READING

Choral activities on the chalkboard

An example of a Kiswahili choral chart

Another child leads others through a choral activity

A choral chart of picture-words

Another Choral session in another class

A child leads others to read choral charts
ADDENDUM 13: THEMATIC PHOTOGRAPHS-COPYING

Copy letter a-z

Match these shapes

Children in a copying session

A child completes some copying tasks

Copy letters "A-Z"
## ADDENDUM 14: THEMATIC PHOTOGRAPHS-TASK COMPLETION

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count the 'balls'</td>
<td></td>
</tr>
<tr>
<td>Count and add</td>
<td></td>
</tr>
<tr>
<td>&quot;Match them&quot; e.g &quot;Leg=sock, Hen=egg&quot;</td>
<td></td>
</tr>
<tr>
<td>Attempt to count</td>
<td></td>
</tr>
<tr>
<td>Addition</td>
<td></td>
</tr>
<tr>
<td>Write in capital letters/small letters</td>
<td></td>
</tr>
</tbody>
</table>
ADDENDUM 15: IMAGES OF SAMPLE FREE PLAY ACTIVITIES (IN BELINDA’S CLASS)

- Free play: Child discovers 'suction' pressure.
- Free play: bottle tops
- Free play: child builds a 'lorry'
- Free play: Child builds a 'house'
- Free play: Play with 'playdough'
- Free play: Slate writing/drawing
ADDENDUM 16: SAMPLE TIME-TABLE (five-year-old class)

<table>
<thead>
<tr>
<th>Time Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days</td>
</tr>
<tr>
<td>Monday</td>
</tr>
<tr>
<td>Tuesday</td>
</tr>
<tr>
<td>Wednesday</td>
</tr>
<tr>
<td>Thursday</td>
</tr>
<tr>
<td>Friday</td>
</tr>
<tr>
<td>Saturday</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
</tr>
<tr>
<td>Mathematics</td>
</tr>
<tr>
<td>Science</td>
</tr>
<tr>
<td>Social Studies</td>
</tr>
<tr>
<td>Music</td>
</tr>
<tr>
<td>Art</td>
</tr>
<tr>
<td>Physical Education</td>
</tr>
<tr>
<td>Assembly</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
</tr>
<tr>
<td>Lunch Break</td>
</tr>
<tr>
<td>Afternoon</td>
</tr>
<tr>
<td>Afternoon</td>
</tr>
<tr>
<td>Evening</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Washing of Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
</tr>
<tr>
<td>Lunch Break</td>
</tr>
<tr>
<td>Afternoon</td>
</tr>
<tr>
<td>Afternoon</td>
</tr>
<tr>
<td>Evening</td>
</tr>
</tbody>
</table>
ADDENDUM 17: ETHICS CLEARANCE CERTIFICATE

UNIVERSITY OF PRETORIA
FACULTY OF EDUCATION
RESEARCH ETHICS COMMITTEE

<table>
<thead>
<tr>
<th>CLEARANCE CERTIFICATE</th>
<th>CLEARANCE NUMBER: EP06/1001</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEGREE AND PROJECT</td>
<td>Pre-school teachers' beliefs of developmentally appropriate educational practices.</td>
</tr>
<tr>
<td>INVESTIGATOR(S)</td>
<td>Rose Ruto-Korir - 26267103</td>
</tr>
<tr>
<td>DEPARTMENT</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>DATE CONSIDERED</td>
<td>27 February 2007</td>
</tr>
<tr>
<td>DECISION OF THE COMMITTEE</td>
<td>APPROVED</td>
</tr>
</tbody>
</table>

Please note:
For Masters applications, ethical clearance is valid for 2 years.
For PhD applications, ethical clearance is valid for 3 years.

<table>
<thead>
<tr>
<th>CHAIRPERSON OF ETHICS COMMITTEE</th>
<th>Dr S Human-Vogel</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE</td>
<td>27 February 2007</td>
</tr>
</tbody>
</table>

CC
- Dr C Lubbe
- Prof I Lieft
- Ms Jeanine Botha

This ethical clearance certificate is issued subject to the following conditions:
1. A signed personal declaration of responsibility.
2. If the research question changes significantly so as to alter the nature of the study, a new application for ethical clearance must be submitted.
3. It remains the student's responsibility to ensure that all the necessary forms for informed consent are kept for future queries.

Please quote the clearance number in all enquiries.

Addenda
After the sunset of this academic voyage

I started this journey with certainty about my knowledge. However, I soon realized that the state of knowing is only but transient. As I reached several states of disequilibrium, I acknowledged my limited knowledge, and that I did not know anymore. Even as I come close to another ephemeral state of equilibrium, I recognize it as temporal. I look forward to a future of many such states of disequilibrium, because it is only then that growth is possible. Since life is about learning, I have had to unlearn so that I can learn. for Mallaguzi said “but not knowing is the condition that makes us continue to search; in this regard we are in the same situation as children” (Mallaguzi, 1998:89).

Ralph Waldo Emerson adds, “Knowledge is knowing that we cannot know”...And so, on this road, I join the child...

As I come to the end of this journey that has taken me through various terrains, I reflect back on it not only as an academic journey, but one that has also enriched my entire state of being. Foremost, it has been a journey worth taking, through the academic paths of Tukkies. In this path, I acknowledge the University’s commitment to scholarship through fora that makes scholarship a reality. Apart from a well-resourced library, at the Faculty of Education, I have had the privilege to interact face to face with world scholars, among them Prof. John Creswell and Prof. Mark Savickas.

My first moment of reckoning about this commitment came at the University’s centenary celebrations faculty dinner in 2008. I had the privilege and honour to move a vote of thanks to Prof. John Creswell on behalf of the faculty during the Faculty’s centenary dinner.

For many days during and after the function, I thought it was a dream that I had actually seen and talked with Prof. John Creswell. Prior to meeting him on this momentous- and- once- in a lifetime privilege, Prof. Creswell’s books had been an immense resource that influenced my PhD journey. Below is the vote of thanks speech (in the following captions that I made during the dinner party with Prof. Creswell.)

Epilogue: After the sunset of all voyages
Vote of thanks speech to Prof Creswell,

“Our guest of honour, Sir Prof. Creswell,

The Principal and Vice chancellor University of Pretoria, Prof. Pistorius, Dean, Faculty of Education, Prof Irma Eloff, deans of other faculties, all faculty of Education staff and students, on behalf of the University of Pretoria, and that of the entire faculty of Education, it gives me great pleasure and honour to stand here before you this evening, to express our gratitude for your presence here tonight. Getting the right words to thank such an accomplished scholar as you seems an impossible task. Nevertheless, I will put my best foot forward!

Prof. Creswell, we thank you for accepting to be part of our University’s 100 years of its existence as a knowledge enterprise! Your presence makes our birthday complete. Of course, your presence extends beyond physical presence. You transcend physical space and time in your ideas and influence through your books.

You inspire academic journeys through your books. The ideas in your books speak to the intellectual needs of students and faculty alike! Many at times, I can bet that you are that invincible hand that reaches out to guide that path of the wandering academic wayfarer. My own experience suffices about your presence. I remember when I completed my fieldwork, I felt so overwhelmed and lost in the mounds of data...In the midst of the wonder, I stumbled upon your perpetual presence on Page 43 of your 2007 book “The Five approaches to inquiry & design”. You observe that ‘data analysis is often a lonely and perplexing journey’. Your assurance gave me so much solace. I felt in your invincible company and thought to myself, “If Prof. Creswell would say it, it is a normal process in qualitative data”.

Whenever I visit Google scholar website, their mission, “standing on the shoulders of giants”, attracts me! Sir Isaac Newton said ‘if I have seen further, it is by standing on the shoulders of giants’. No doubt too, that you are one among the giants on whose shoulders we stand at the University of Pretoria. Thank you for being a vibrant influence in the academic enterprise to which we belong, and for scaling scholarship to impeccable levels of quality."
John Ruskin said about books “all books are divisible by two: books of the hour and books of all time”. Prof, yours are books of all time! Samuel Butler adds, “Books are imprisoned souls till someone takes them down from the shelf and frees them”. Prof. Creswell, your books are free; and I have evidence: they are ever on hold the whole year round...indeed free...!

We have learnt many lessons from your seminars since Monday, one of which is that it is still possible to publish regardless of the teaching workload, if academics use classroom experiences, as reflected by your own ‘gunman publication’. So, from today, we know that publishing blends well with ‘busy teaching’. But Prof., since you know the challenges of publishing, and for which many of us here tonight aspire to do especially with publishing houses like Sage, I can bet that some of us would like ‘that reference’ from you...

The saying goes, ‘if you want to know someone’s character, look at their friends’. Your presence here tonight no doubt embodies the character of the faculty of Education. As you leave to go back to Lincoln, Nebraska, please know that in the Faculty of Education you have a friend in all of us. We as faculty proudly associate with you. As a reminder of this friendship, please accept this gift from us. Let it be a reminder of our true friendship with you, which reflect a big heart in the membership of the Faculty of Education, University of Pretoria. Thank you very much”
“Standing on the shoulders of a giant”: A dream comes true as I meet Prof. John Creswell. (In the pictures, I move a vote of thanks to Prof. Creswell on behalf of the Faculty of Education during the centenary dinner on 22nd October, 2008).

As I exit 'Tukkies', my PhD journey has given me several opportunities for self-introspection in various states of my being, and to open myself up to learn. Such introspection has helped me to attain higher levels of self-knowledge as a human being beyond the academic world.

THE END

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1 I obtained consent from Prof. Creswell to include his photographs in my thesis.

Epilogue: After the sunset of all voyages